L. 78 NO. 7

textile bulletin

JULY • 1952

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ABC

JACOBS

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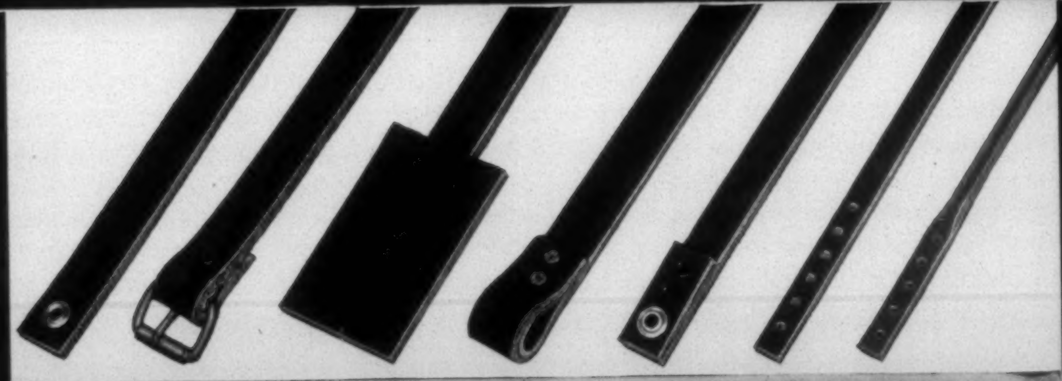
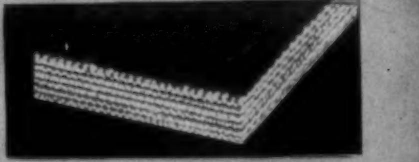


AN ENGINEERED PRODUCT:

Pre-stretched and treated for flexibility and **minimum of adjustment.** Unequalled in resistance to oil and heat, strength and long life. Uniform in thickness.

Available: 5 ply—5/32" thick
7 ply—7/32" thick



THE BULLARD CLARK CO.

Immediate delivery in any width or shape.

JACOBS

SOUTHERN
DIVISION
Charlotte, N. C.

NORTHERN
DIVISION
Danielson, Conn.

SERVING THE TEXTILE INDUSTRY SINCE 1899

SONOCO

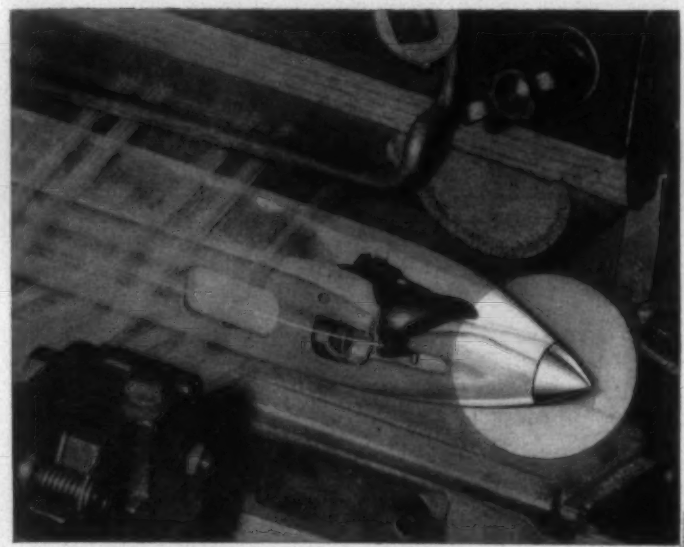
Precision Paper Products

The SONOCO 3°30′ cone—a notable example of the research and technical "know how" that has kept pace with the ever-changing textile industry. This cone and its taper solves high speed winding, magazine creeling and knitting machine delivery, for rayon, nylon and other filament yarns, and is made with surface finishes to fit the specific job.

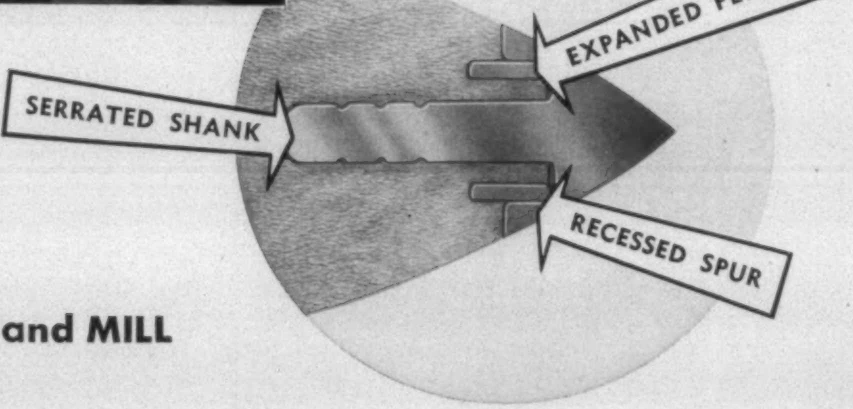
DEPENDABLE SOURCE OF SUPPLY

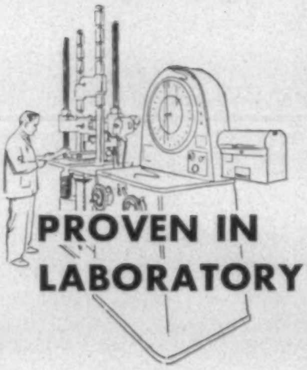
sonoco
SERVES THE WORLD
PAPER CARRIERS
REG. U.S. PAT. OFF.

50% GREATER HOLDING POWER!



with the NEW DRAPER *Recessed* SHUTTLE SPUR*





PROVEN IN LABORATORY and MILL

Having 50% greater holding power, the Draper Recessed Spur resists the common shuttle spur tendency to loosen, revolve, and move off-center. It can be supplied with or without a fibre washer.

The Draper Recessed Spur has been proven in the laboratory and in an ever increasing number of mills for more than four years.

3 WAY HOLDING ACTION!

Ask to have the Draper Recessed Spur incorporated in your shuttle today.

*PATENTED

"Retaining Leadership through Research"

DRAPER *Corporation*

ATLANTA, GA. HOPEDALE, MASS. SPARTANBURG, S. C.

THE WORLD'S LARGEST MANUFACTURER OF AUTOMATIC LOOMS

Complete Blending, Opening, Cleaning and Picking Systems for Cotton Mills

Opening, Blending and Picking Systems for Synthetic Fibers

New, and Rebuilt, Single-Process Pickers

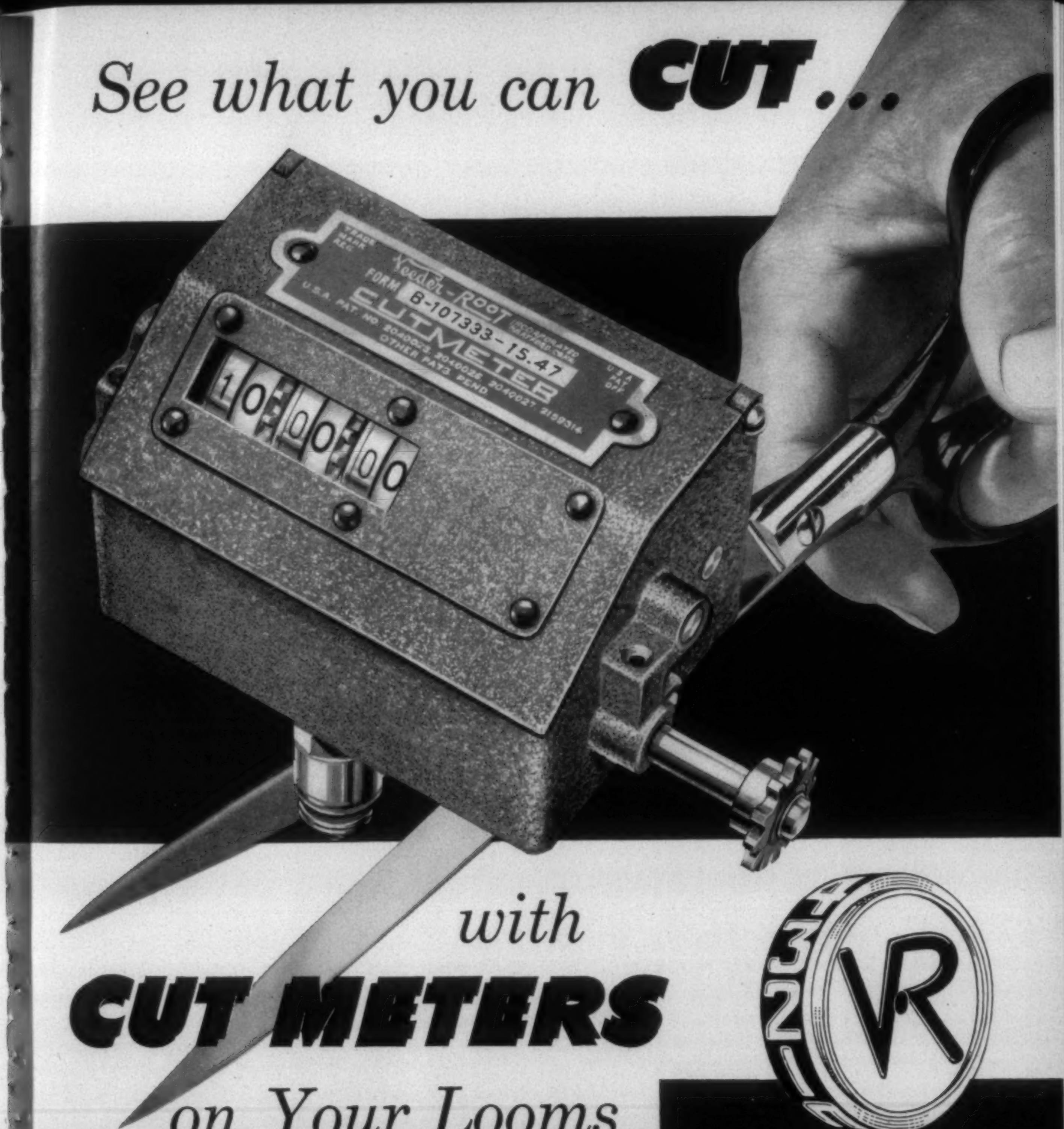
The Aldrich Synchronized Single Process Picking System has consistently produced more uniform card sliver than any other picking system.

Parts for Kitson Pickers Always in Stock for Immediate Delivery

AldricH MachinE WorkS

Greenwood, South Carolina

See what you can CUT...



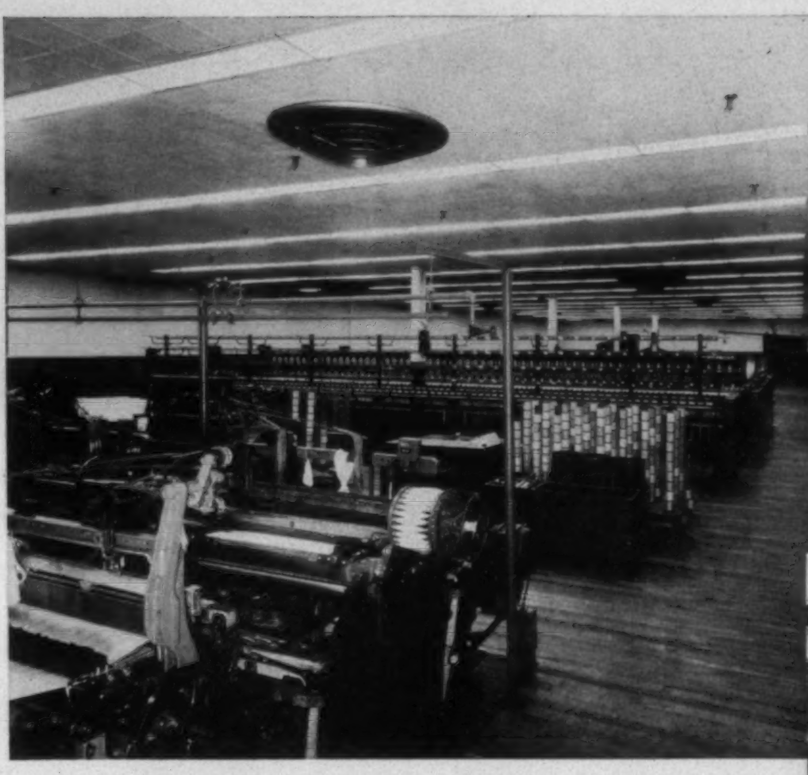
with CUT METERS on Your Looms

You can cut out the need for cut marks. You can cut working costs . . . and working responsibility per man, setting them free for other work. You can cut waste ends . . . and cut down on seconds. You can cut production losses . . . and cut out streaks and creases. You can simplify inventory control. AND YOU CAN ASSURE YOUR CUSTOMERS OF UNIFORM CUTS.

Only the Veeder-Root Cut Meter (valuable adjunct to the 2-3 Convertible Pick Counter) can help you cut costs in so many ways . . . on *all* your looms. See your nearest Veeder-Root office now.

VEEDER-ROOT
INCORPORATED

"Counting House of the Textile Industry"



Pilot Plant of Pepperell Manufacturing Company, Lindale, Ga.

At the heart of the pilot plant is this air conditioning equipment room — containing compressors, water chiller and cool water circulating pump.

PEPPERELL'S PILOT PLANT

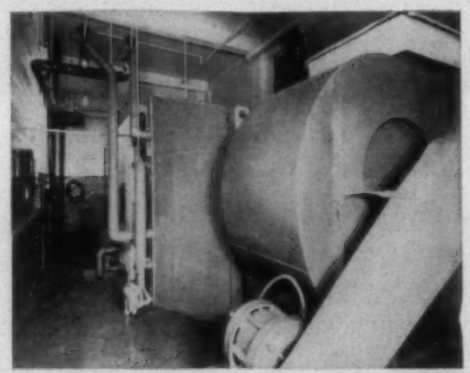
. . . synthetic fiber research at its best!

Amco Central Station Air Conditioning meets Pepperell's exacting specifications for control of temperature, humidity, air cleanliness.

When Pepperell Manufacturing Company built their "miniature mill" at Lindale, Georgia, they set out to produce a nearly perfect pilot plant for test operations with the newest synthetic textile fibers. To maintain complete atmospheric control the year-round, they had Amco install central station air conditioning with refrigeration and electrostatic air filtering. Accurate, adjustable control of temperature and humidity assures the exact conditions required for any given pilot operation. All ducts are hidden for neat appearance and easy housekeeping.

Of course, it isn't always practical, or desirable, to "streamline" a plant like this. Your plant — like many mills — may already have a modern, efficient humidification system. You can easily add COOLING with an Amco ductless system — without discarding anything, and by making only modest alterations.

Amco systems give you a choice of humidification, evaporative cooling (central station, dry duct, or ductless types) or refrigeration, alone or in combination. You can rely on Amco to give you advice on the system best suited to your needs. Call an Amco engineer.



Apparatus room contains air blower and washer

Benefits of Controlled Humidification and Cooling

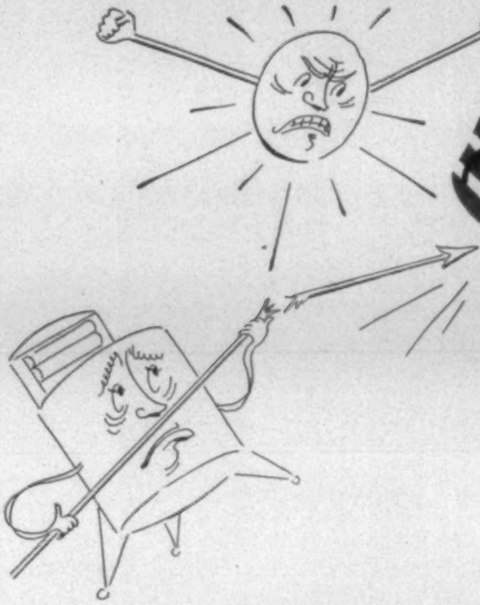
Regain maintained • yarn counts kept more even • static electricity eliminated • closer machine adjustments and higher speed maintained • less broken fibers, dust and fly • cleaner yarns • stronger, more even fabrics • greater worker comfort and efficiency

AMCO

AIR CONDITIONING SYSTEMS since 1888

Humidification • Evaporative Cooling (Ductless or Central Station) • Refrigeration

AMERICAN MOISTENING COMPANY, PROVIDENCE, R. I. • ATLANTA • BOSTON • CAMDEN • CHARLOTTE • AFFILIATED WITH GRINNELL COMPANY, INC.



Direct Dyed

but triple fast

Not just fast to laundering and perspiration—fast to light, too!

Yes, CUPROFIX colors and after-treatment give cotton and rayon fabrics such a high degree of fastness *to all three* . . . that direct dyeing now compares favorably with more expensive vat dyeing!

But *only* with CUPROFIX can you expect direct-dyed fabrics to have satisfactory fastness to *sunlight.* Only CUPROFIX gives you triple fastness in direct dyeing.

Economy—and Quality, too!

You save many dollars when you use direct dyes. For pennies more—relatively—you can make the big saving *without* sacrificing quality . . . and compete successfully with many vat-dyed fabrics.

Get acquainted with CUPROFIX now—write us for Booklet U. S. 125. SANDOZ CHEMICAL WORKS, INC., 61 Van Dam St., New York 13, N.Y.

Label Resin-Treated Garments "WASHABLE"

Adding CUPROFIX to the resin bath increases fastness to washing sufficiently to permit labeling garments "washable" instead of just "dry cleanable". It also:

materially increases efficiency of the usual resin treatment

eliminates in many cases the effect of resin on light fastness.

SANDOZ CHEMICAL WORKS, Inc.
61 Van Dam Street, New York 13,
N. Y. Application laboratories and
stocks at Boston, Philadelphia,
Charlotte, Los Angeles, Toronto.
Other branches at Providence,
Paterson, Chicago.

Fast to Light · Wash · Perspiration
Pressing · Cleaning

CUPROFIX

BY SANDOZ

SANDOZ *thinks ahead with textiles*

SANDOZ

These Twin

NEW, IMPROVED DAYCO COT

**Higher fiber repellence!
Stops time-outs for ends-down and lap-ups!
Cuts labor costs!**

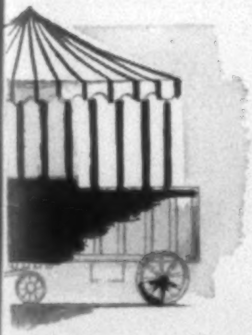
Are you using ordinary cots now? Then look for *years* of extra cot life, when you change over to the Dayco Cot!

Look for improved fiber repellence, too—that will mean fewer lap-ups, fewer ends-down, cleaner yarn. And don't worry about the fibers you're spinning—the new Dayco Cot can be used on cotton, wool, blends or synthetic fibers!

What makes the Dayco Cot so much better than former cots? An entirely new compound of American Rubber, that gives you non-stop performance . . . reduces non-productive labor costs of handling ends-down, lap-ups. Put Dayco Cots on your frames, and expect to see a new standard of cot performance. You won't be disappointed!

DAYTON RUBBER CO., Textile Division, Woodside Bldg., Greenville, S. C.

Performers Outdraw 'em all!



No wonder the Dayco Cot and the Dayco Long Draft Apron are such big attractions in the textile field! They're outstanding *performers*—cutting maintenance costs while they boost mill output!

Dayco Long Draft Apron

With *this* apron, there's no warm-up period needed before you start production. You just turn on the power and spin, even on Monday morning mill openings. No false starts!

It's a precision apron—lengths and widths can be furnished for any systems. Dayton's exclusive marking methods guarantee perfect fit regardless of type or age of system. Thickness, diameter and width never vary. Controlled manufacturing assures uniform thickness so necessary to proper operation of both single and double apron systems.

Try the Dayco Long Draft Apron, and see for yourself how it cuts down starting time and maintenance, and how it yields up to 10% more uniform yarn!

Single Apron System

Two Apron System

Saves starting time! Speeds production! Cuts maintenance costs!

Dayton Rubber

Since 1905

You Can't Depend on these Numbers . . .

But You CAN Depend on *Ashworth's* 4-6-7

4 FACTORIES (Fall River, Worcester, Philadelphia, Greenville) assure you of an uninterrupted supply of card clothing. Decentralized and strategically located, these factories can "pinch hit" for each other in emergencies.

6 REPAIR SHOPS (Fall River, Philadelphia, Charlotte, Greenville, Atlanta, Dallas (Textile Supply Co.)) assure convenient, economical and prompt reclothing and repair service.

7 DISTRIBUTING POINTS (Fall River, Worcester, Philadelphia, Charlotte, Greenville, Atlanta, Dallas (Textile Supply Co.)) make Ashworth products and consultation service more readily available.

AND DON'T FORGET "90". More than 90 years of experience in cards and card clothing — your guide to a consistently high standard of quality in manufacture and efficiency in performance.

Buy Ashworth Card Clothing and get DEPENDABILITY.

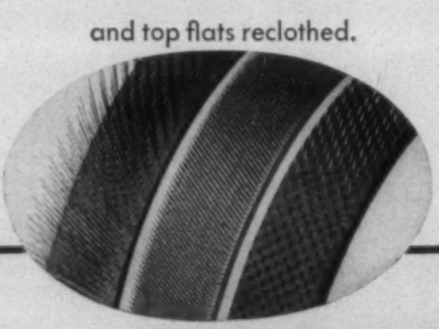
PRODUCTS AND SERVICES

. . . Card Clothing For cotton, wool, worsted, silk, rayon and asbestos cards and for all types of napping machinery. Brusher clothing and card clothing for special purposes. Lickerin wire and garnet wire. Sole distributors for Platt's metallic wire. Lickerins and top flats reclothed.

ASHWORTH BROS., INC.

American Card Clothing Co. (Woolen Division)

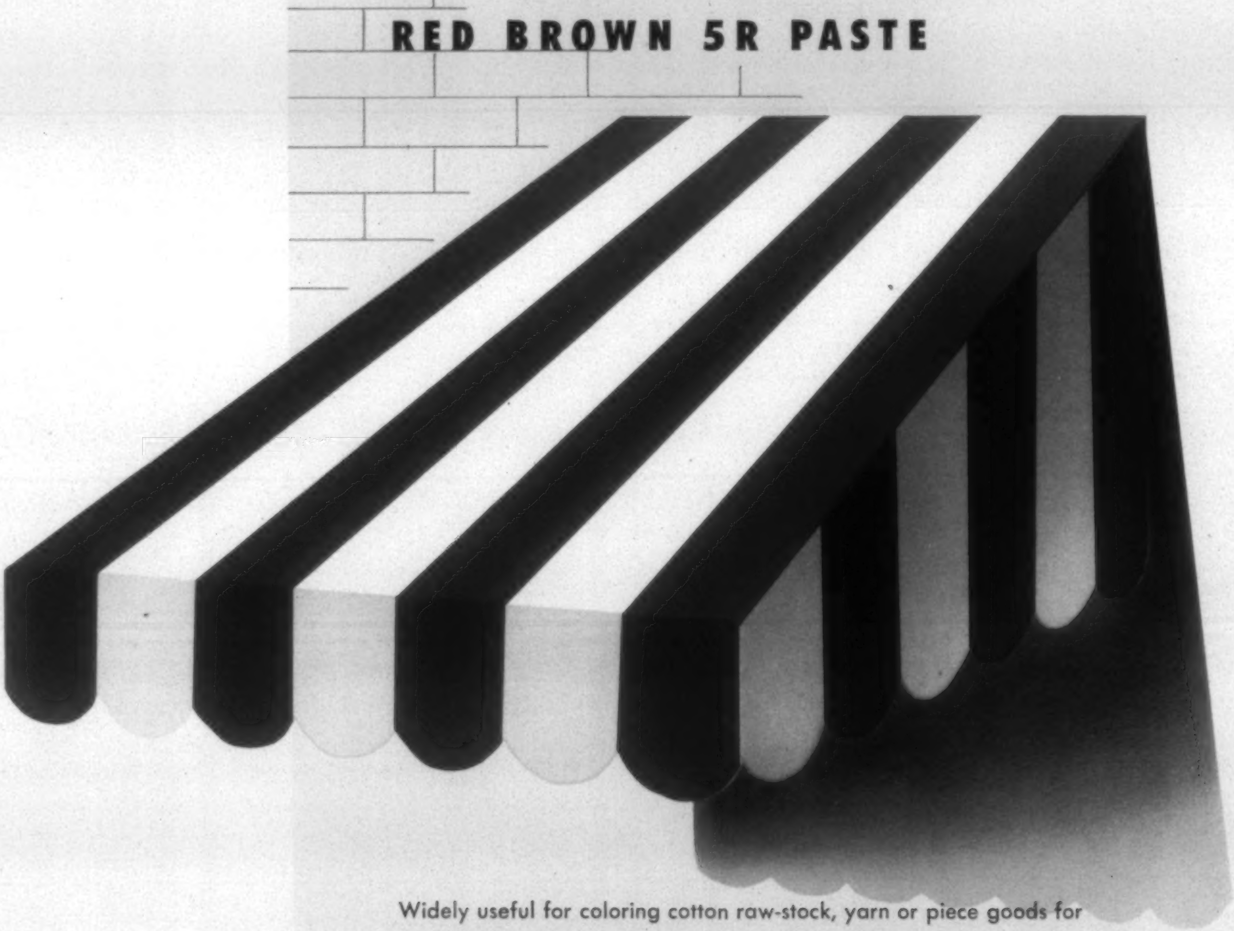
FALL RIVER • WORCESTER • PHILADELPHIA • CHARLOTTE • GREENVILLE
ATLANTA • DALLAS (Textile Supply Co.)



Ashworth CARD CLOTHING

Shade with a place in the sun . . .

NATIONAL CARBANTHRENE RED BROWN 5R PASTE



Widely useful for coloring cotton raw-stock, yarn or piece goods for better-grade dress or shirting fabrics, embroidery yarns, thread, drapery and upholstery fabrics and awning duck, this National anthraquinone vat dye has exceptional fastness to most color-destroying agencies.

It is rated "excellent" in fastness to washing, perspiration, water spotting, sea water, boiling soap, stoving, chlorine, peroxide and cross dyeing; "very good" to rubbing, mercerizing, boiling soda ash and light.

Get in touch with the nearest National Aniline office for technical and application data and a working sample of this addition to National's fast growing line of vat dyes. And always remember—we welcome the opportunity to provide technical service on difficult matches and to serve your everyday dyestuffs needs promptly from nearby stocks.

NATIONAL ANILINE DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK 6, N.Y. • BOwling Green 9-2240

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USTER CORPORATION 2516 Wilkinson Blvd., Charlotte, N. C.

Sales Offices: Boston - Atlanta - In Canada: Hugh Williams & Co., 47 Colborne St., Toronto, Ontario

Here's News for Print Cloth and Sheeting Mills

Stationary warp tying is no longer considered the best system of tying in print cloth and sheeting mills. True it was the best . . . until the advent of the USTER system of portable tying.

Stationary Principles—Made Portable

The Uster is, in a sense, a stationary machine made portable. This means that mills now keep all of the advantages of stationary tying, eliminate the disadvantages, while adding all of the following advantages of the Uster system of portable tying. These advantages are as follows:

"Production Line" Methods

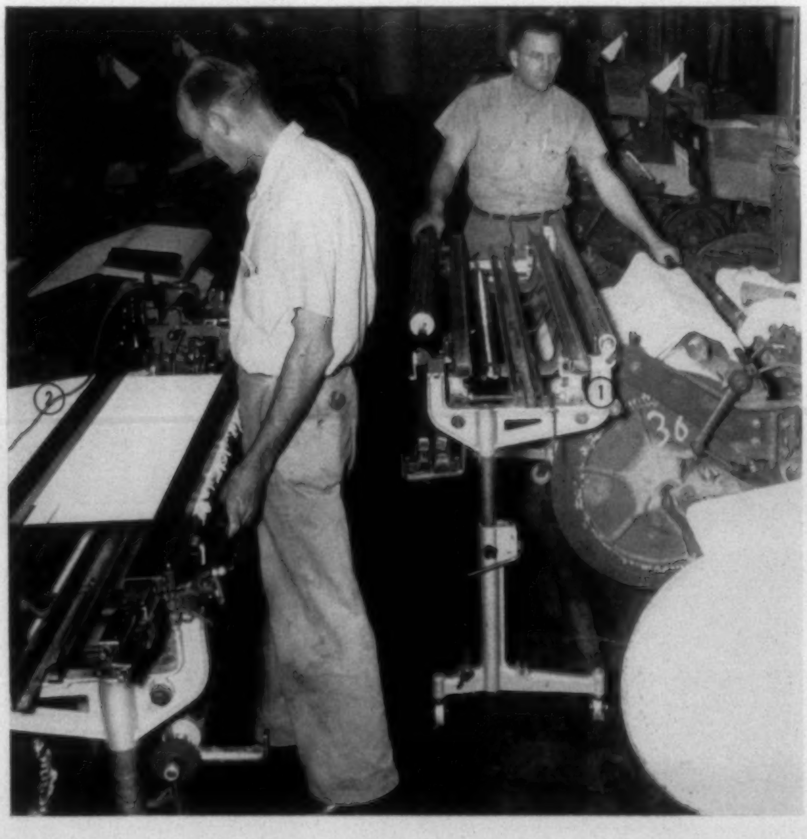
The Uster system of portable tying adheres to the efficient "production line" method of preparing a new warp on one frame (Fig. 1) while the tying head is tying on another frame (Fig. 2). Thus the tying head is virtually in continuous operation, resulting in maximum tying efficiency. Loom downtime, therefore, is no longer an objection to portable tying.

Quicker Loom Start-Up

With the Uster Machine, the warp is tied in one "bite" and at the same time tied perfectly parallel to the loom. This means more even tension throughout the warp making pull-over much easier. Broken ends are virtually eliminated resulting in far less smashing. Also smashing necessitated by transporting tied warps is eliminated. Naturally looms are started up far quicker.

Warp Hanging Eliminated

The drudgery of warp hanging is eliminated. Loom fixers are relieved of the time consuming task of hanging warps, adjusting harnesses, shuttle boxes, and reeds each time a new warp is started.



Supply Cost Reduction a Big Factor

Drop wires, shaft, heddles and reeds often become damaged thru transporting and handling. Beams with drop wires, harness shaft, reeds are bulky and awkward to handle. With portable tying the major portion of this handling is unnecessary.

Mis-alignment of the reed in a loom is the largest contributing factor to shuttle wear. With portable tying the reed stays "put" thereby reducing the chance for reed mis-alignment. Shuttle wear is, therefore, reduced considerably.

One print cloth mill claims: "Our savings in shuttles, harnesses, and reeds alone paid for our Uster in less than two years!"

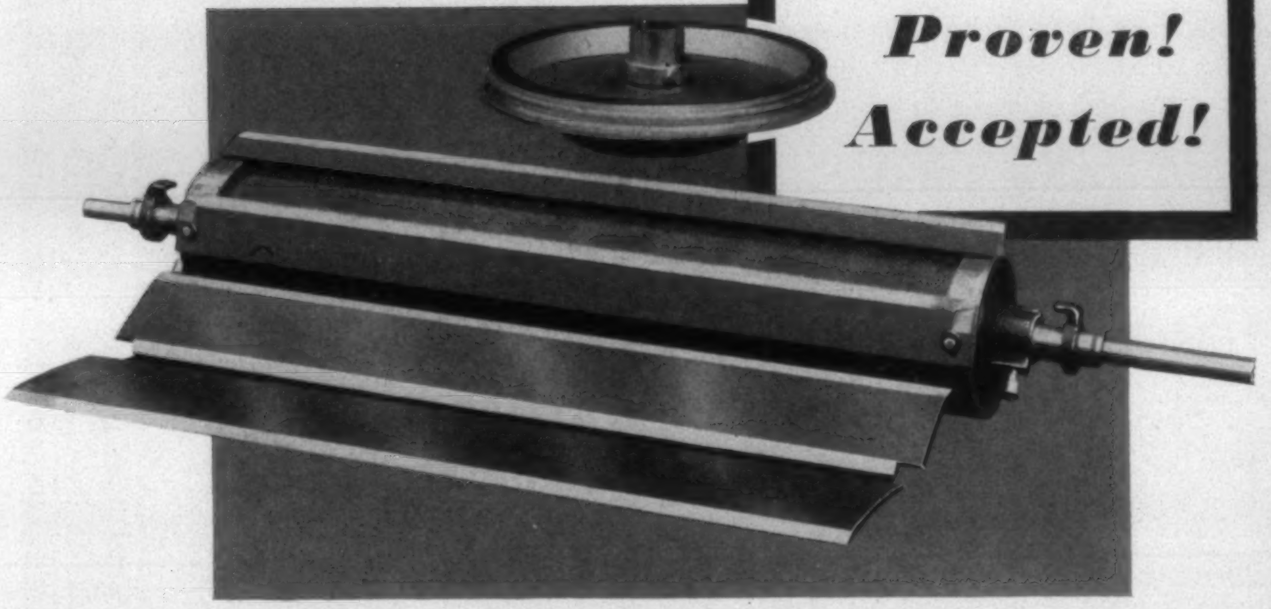
Why Uster?

The Uster Warp Tying Machine has a world-wide reputation as being the most efficient and finest warp tying machine obtainable. Faithful service of over 2,000 machines in thirty-seven countries has earned this reputation!

We will gladly make a warp tying survey for you at no obligation. Contact us and an engineer will call at your convenience.

Address: Uster Corporation, Charlotte, N. C.

Tested!
Proven!
Accepted!



THE GOSSETT IMPROVED CARD FANCY

Eliminates Lumps and Flakes When Carding Synthetics

It is precision built . . . . . machined to your specifications and tolerances by GOSSETT technicians. The extra long spring steel wire fillets are guaranteed to fluff all synthetic fibers from the card cylinder thus enabling the doffer to pick them off evenly. Further, the GOSSETT Card Fancy fluffs the synthetic fibers so well that the doffer will pull off and make as good a sliver as you have ever seen.

When you install the improved GOSSETT Card Fancy there will be no more excess loading on the cylinder. Write at once for full particulars and estimated cost.

B. W. GOSSETT, President
E. C. MASON, Sales Manager
D. W. SMITH, N. C.-Va. Representative

GOSSETT MACHINE WORKS, INC.
GASTONIA, NORTH CAROLINA

What's corn doing "deep in the heart of Texas"?

Research discovered that drilling for oil could be expedited by the use of a binding agent made of a product of corn. This firmed up the side walls . . . also aided in the early flow of sludge. "Black gold" speeded by yellow corn! This is but one of the numerous examples of how continuous basic research in corn helps American industry . . . helps you.

Corn products in textiles

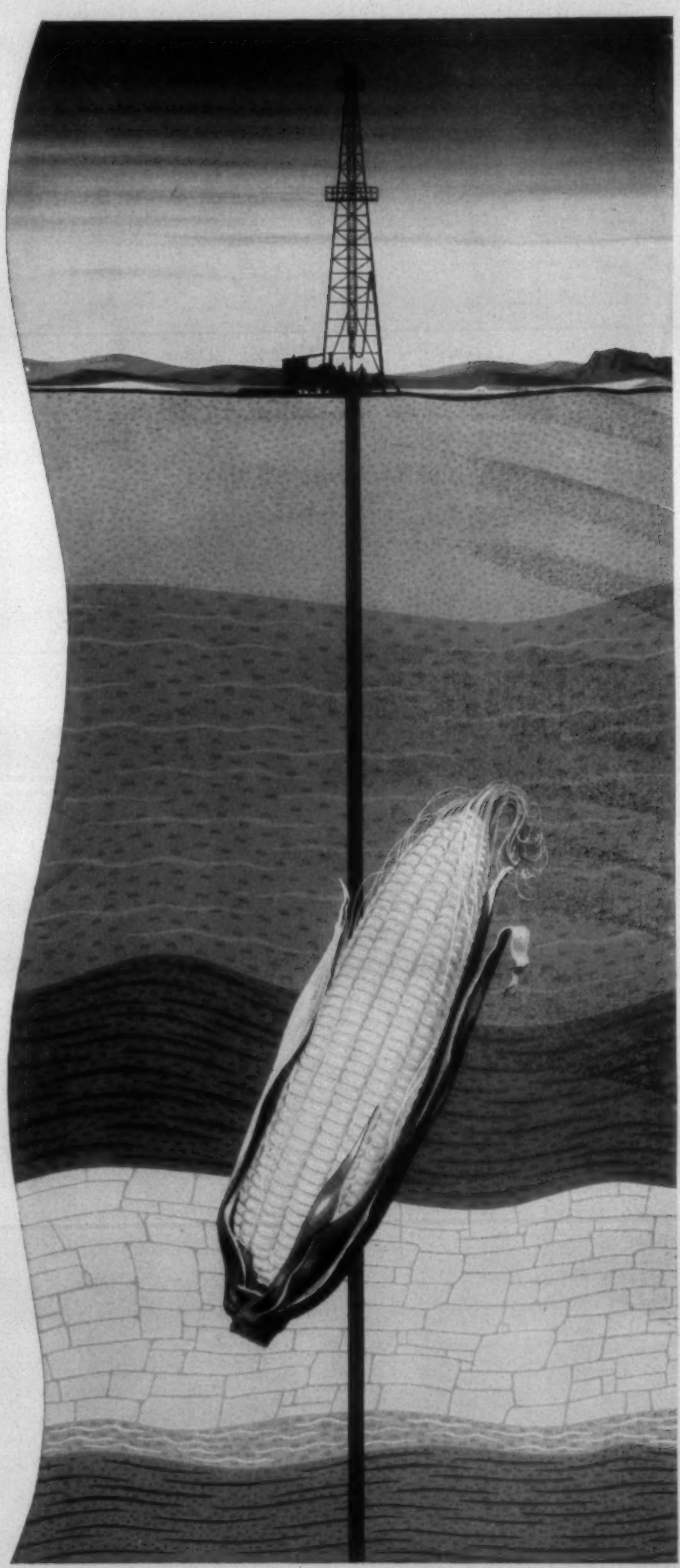
In the textile field new starches, gums and dextrins provide superior formula ingredients for many textile processes. New techniques involving the use of corn products are being developed as part of a continuing research program at Corn Products Refining Company.

If you have a production problem why not check with Corn Products? A complete line of corn products for every purpose is available. Technical service is yours . . . no obligation, of course.

CORN PRODUCTS REFINING COMPANY
17 Battery Place, New York 4, N. Y.

Manufacturers of

GLOBE brand **dextrines, gums**	**GLOBE** **brand starch**	**EAGLE brand** **corn starch**



tomorrow's production

with yesteryear's frames?

THE SIXTY-FOUR DOLLAR QUESTION confronting many mills is "How can we make our yarn output competitive . . . in quality, quantity, and cost . . . and still utilize our old band-driven or old-style tape-driven frames?"

Scores of mills have found a profitable and highly satisfactory answer to this question in "Meadows Modernizers" . . . individual drive pulleys, ball bearing tape tension pulleys—that assure even tension at all times—a more uniform speed and twist—fewer ends down.

If it's changing from band to tape-drive . . . cutting and lengthening frames . . . replacing troublesome cylinders on long tape-driven frames, or even changing the gauge and ring size . . . or merely accessories such as tension pulleys, separator shields, saddles, etc.—consult us before making final decision, and let us give you the benefit of our experience along this line.

Ball Bearing Tension Pulleys

•

Individual Drive Pulleys

•

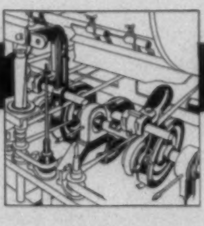
Aluminum Alloy Separators

•

Silent Chain Drive

•

High-Strength Polished Steel Shafting, mounted on Heavy Duty Self-aligning Ball Bearings



MEADOWS CONVERSIONS

MEADOWS MANUFACTURING COMPANY • ATLANTA, GA.

Representatives:

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MATTHEWS EQUIPMENT COMPANY
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SAM HOGG
Atlanta, Ga.

COLEMAN-ROWE, INC.
P.O. Box 782
Salisbury, N. C.

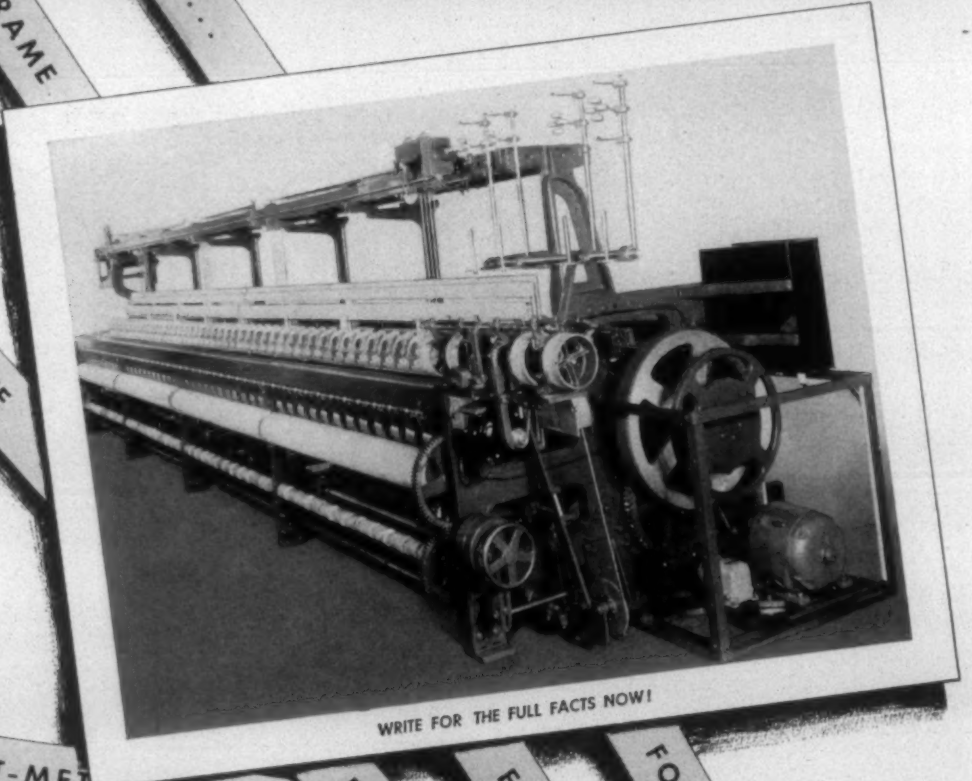
C&K

has designed ALL these features into this New Multiple-Shuttle Narrow-Fabric Loom

LONG OR SHORT LOOM? . . .

ALL-METAL FRAME

NEW DRIVE



WRITE FOR THE FULL FACTS NOW!

LIGHT-METAL LAY

PRECISION C&K CONSTRUCTION

ELECTRICAL BRAKING

FOR HIGH SPEEDS

TAKE YOUR PICK!

VARIOUS LETOFFS AVAILABLE

HEAD MOTION OR DOBBY . . .

NEW END-CAM HARNESS MOTION

This invisible trademark stands back of the trademarks of the World's Finest Woven Fabrics

Crompton & Knowles LOOM WORKS

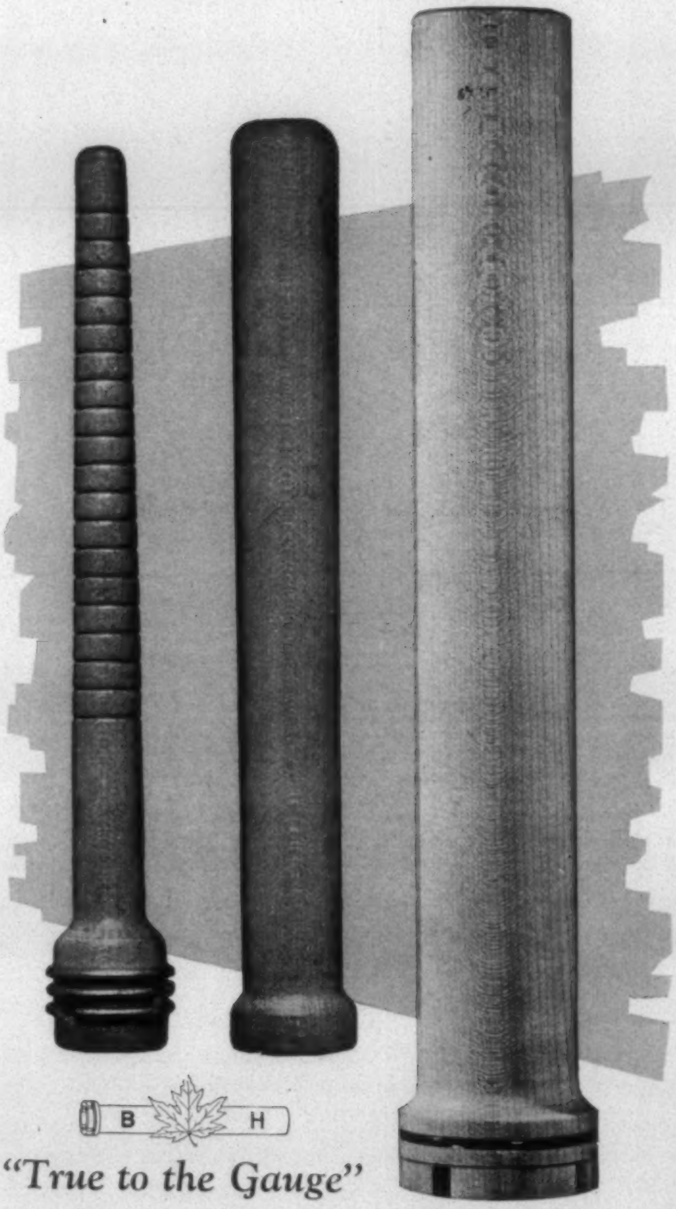
WORCESTER 1, MASSACHUSETTS, U. S. A.

PHILADELPHIA, PA. • CHARLOTTE, N. C. • ALLENTOWN, PA. • CROMPTON & KNOWLES JACQUARD & SUPPLY CO., PAWTUCKET, R. I. • CROMPTON & KNOWLES OF CANADA, LTD., MONTREAL, QUE.

TODAY, *as in past years . . .*

YOUR BEST BUY IN BOBBINS IS

Bowen-Hunter



B H

"True to the Gauge"

To give these bobbins their fine quality only the best of Vermont Hard Woods are used. Thorough seasoning is augmented by conditioning with modern equipment. Expert craftsmen bore, ream and turn Bowen-Hunter Bobbins to the most exacting standards of accuracy.

Our Complete Line Includes:

CARD ROOM - AUTOMATIC LOOM
FILLING, WARP AND TWISTER
BOBBINS

New-Era Bobbins for Gwaltney Spinning Frames

Exclusive Bowen-Hunter Southern Representatives for 28 Years

The McLeod Companies

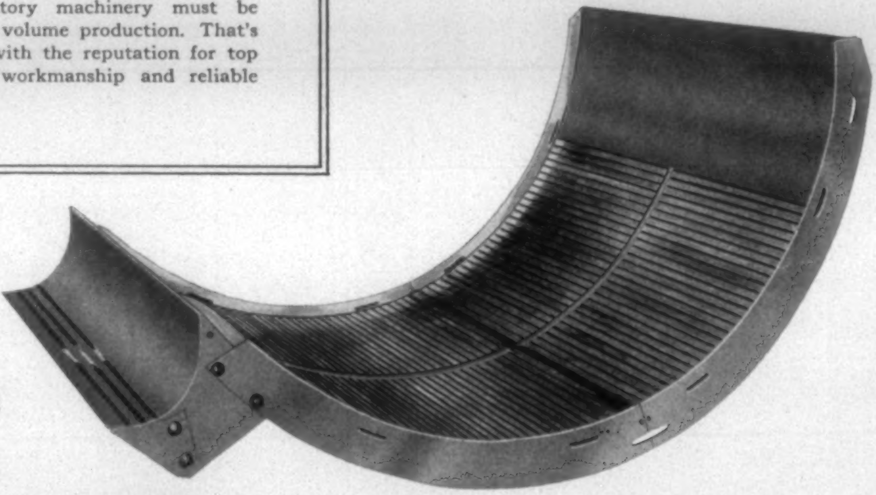
ODELL MILL SUPPLY CO. - Greensboro, N. C.
GREENVILLE TEXTILE SUPPLY CO. - Greenville, S. C.

1919 - 33 Years of Service and Experience - 1952

MORE PRODUCTION AT LOWER COSTS with GASTONIA TEXTILE SHEET METAL PARTS

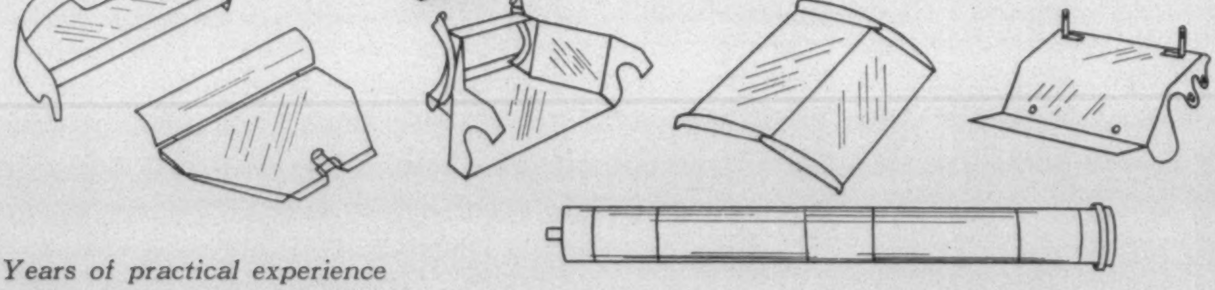
The quality and the profit of your end product starts at the beginning—where preparatory machinery must be geared for efficient, economical volume production. That's our job—a job for specialists with the reputation for top quality products, painstaking workmanship and reliable service.

Standard type rib or perforated Card Screens are precision built on special jigs. Every screen is inspected and double checked for accuracy and tolerance.



Picker, Condenser and Waste Machine Screens of maximum strength and durability are constructed of the best materials available.

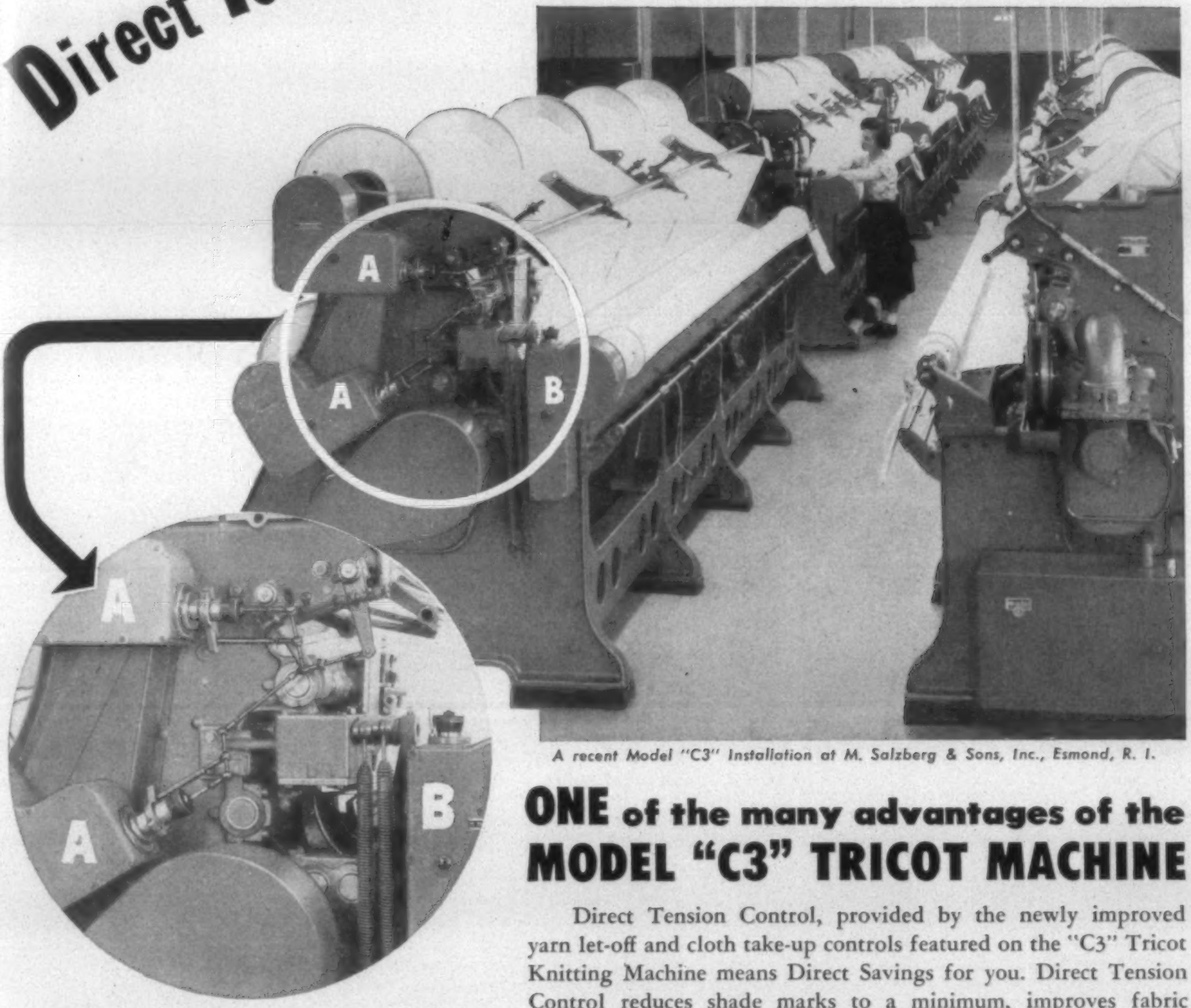
New and rebuilt Cylinders are dynamically balanced to reduce vibration to an absolute minimum.



Years of practical experience —the finest of raw materials —and precision machinery in the hands of skilled workmen go into every product.

GASTONIA TEXTILE SHEET METAL WORKS, Inc.
GASTONIA, NORTH CAROLINA
A SHEET METAL WORKS SERVING TEXTILE MILLS

Direct Tension Control = Direct Savings!



A recent Model "C3" Installation at M. Salzberg & Sons, Inc., Esmond, R. I.

The top and bottom beams are each controlled by improved independent yarn let-off controls (A, A) which assure accurate "runner" control. Fluid driven, they provide positive, sensitive and direct tension-bar-activated yarn control.

Uniform fabric tension is maintained by the new, simplified cloth take-up control (fluid driven) (B) which eliminates the need for intermediate tension rolls, and provides a working area easily accessible to the needle bar.

ONE of the many advantages of the MODEL "C3" TRICOT MACHINE

Direct Tension Control, provided by the newly improved yarn let-off and cloth take-up controls featured on the "C3" Tricot Knitting Machine means Direct Savings for you. Direct Tension Control reduces shade marks to a minimum, improves fabric quality and cuts costly cloth imperfections. End breakages, too, are greatly reduced, and the over-all efficiency of both the machine and operator are considerably increased.

Other outstanding advantages of the Whitin Model "C3" include:

- **Electrical inching device**
- **Butted or leaded needle bars (optional)**
- **Non-reversing quick stop control**
- **Needle-down-position stop unit**
- **Large diameter bakelite cam followers**
- **Center-mounted tachometer and rack counter**
- **High beam location permits easy accessibility to cam shaft**

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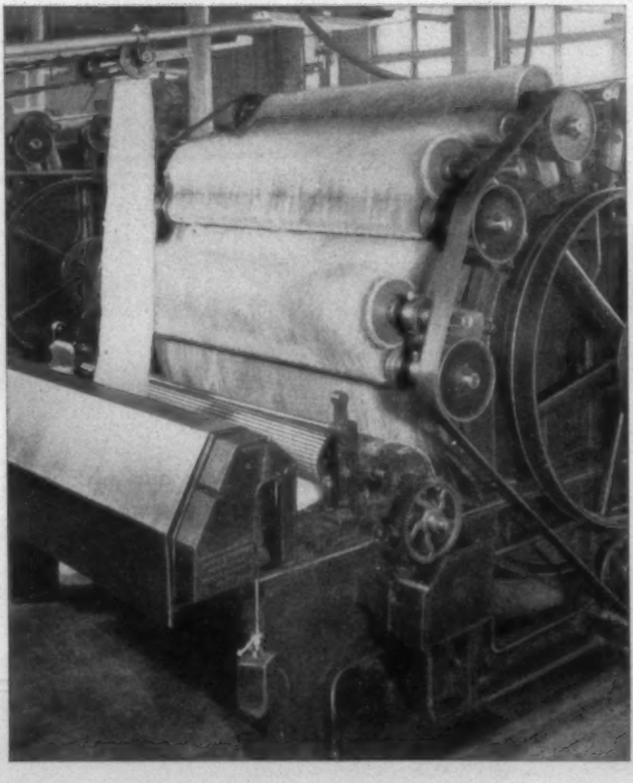

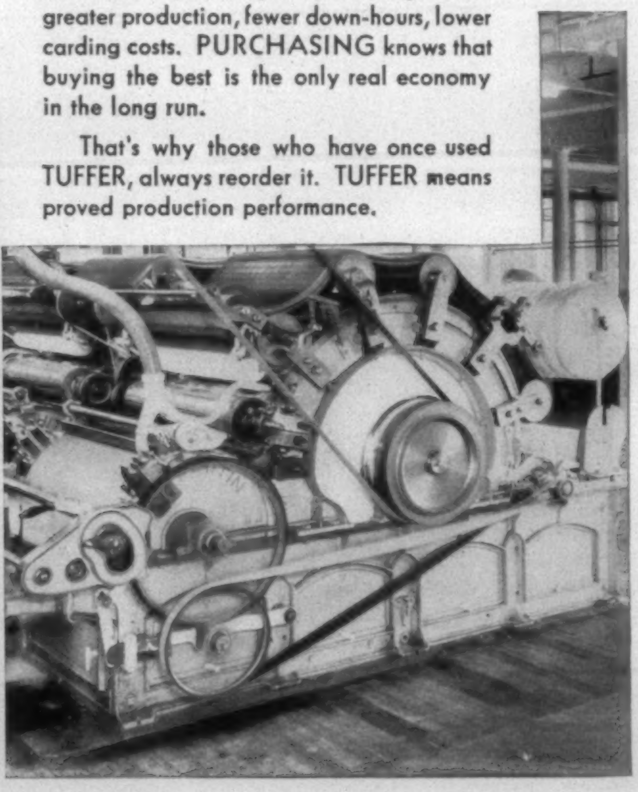

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Rayon Reports

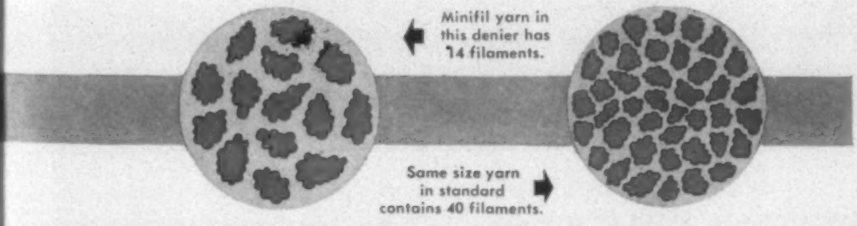
epared Monthly by American Viscose Corporation, New York, N.Y. JULY, 1952

AVISCO INTRODUCES NEW "MINIFIL" CREPE YARNS

Provide new crepe effects to meet current fashion requirements

The demand by women's ready-to-wear designers for "Something new in crepes" is being met by the newly-developed Avisco "Minifil" yarns. As the name implies, these yarns contain the minimum number of filaments required to obtain proper performance in specific yarn sizes. For example, the standard 100-denier crepe yarn contains 40 filaments. 100-denier Minifil yarn consists of 14 filaments. Woven into crepes and other fashion fabrics these yarns impart a hand that is firmer and crisper with excellent draping characteristics.

Cross-section of 100-denier rayon crepe yarns.


Minifil yarn in this denier has 14 filaments.
Same size yarn in standard contains 40 filaments.

These features answer the needs of the fast emerging soft-shape silhouette now being featured in the collections of leading designers and promoted editorially by America's foremost fashion authorities. Their introduction at this time typifies Avisco's close cooperation with the textile industry, to provide the types of yarns needed by the industry to capitalize on constantly changing markets.

One of the new soft-shape dresses in a "Minifil" crepe.

Ankle-length hose by Baker-Cammack Hosiery Mills, Burlington, North Carolina

Avisco Filatex and rayon yarns important factor in volume market for men's hosiery

Volume hosiery producers are turning more and more to Avisco Filatex and rayon yarns to meet consumer demand for men's hose that combines excellent styling and maximum quality at a reasonable price. Filatex has been particularly important in influencing the trend to self-supporting socks. Its lasting elasticity, durability and good laundering qualities are contributing to the wearing qualities and sales appeal of socks in all price ranges.

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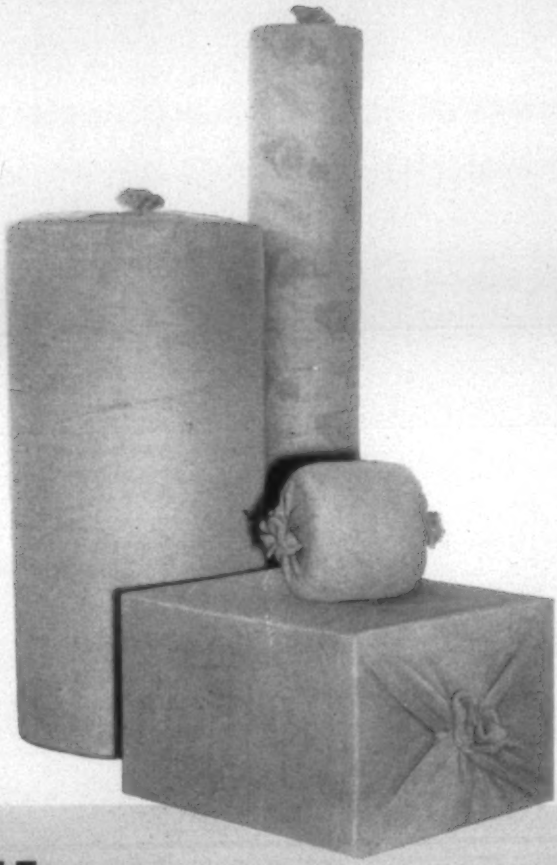

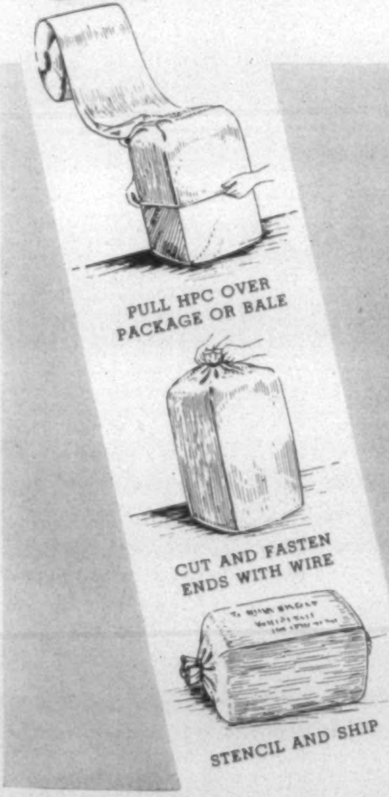

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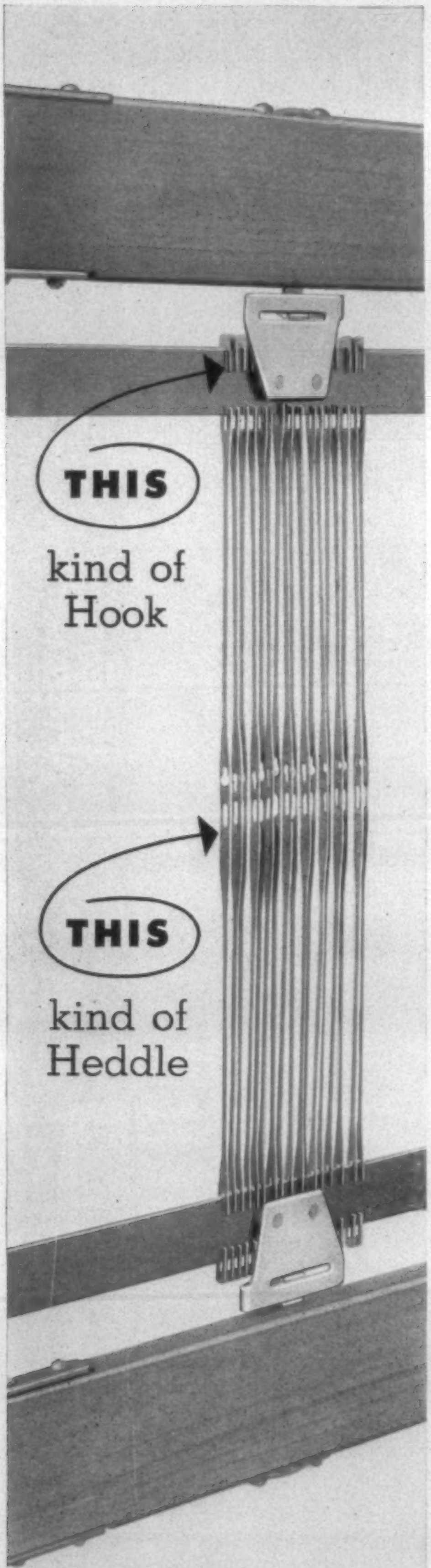
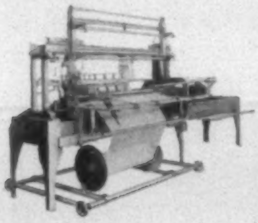


You can improve your weaving **NOW** and be ready for a Warp Drawing Machine **LATER** if you will gradually re-equip with **FULL-FLOATING** type Harness Frames and key-hole type Heddles...

The Barber-Colman Warp Drawing Machine requires equipping your looms with harness having steel heddles of the type shown here, in order that the selecting mechanism may properly position the correct heddle eye for each drawing-in needle stroke. Also, these harness must have support bar hooks of the type shown, in order that the heddles may move freely the full length of the frame. The machine holds the heddles in a group, setting them off at proper intervals as each is drawn. This full-floating construction *improves weaving immediately* by removing restrictions and permitting each heddle to find its proper in-line position in the frame.

Now, the cost of such harness may amount to more than the cost of the Warp Drawing Machine. This should not discourage consideration of the machine, in view of the advantages of substantial cost savings in warp preparation. Since you are replacing heddles and harness frames frequently and constantly as they wear out — why not start *now* to replace with the type that can be used on a Barber-Colman Warp Drawing Machine? Then, when you are ready for the machine, the problem of special harness will have been solved. For details in connection with such a program, we suggest you consult your Barber-Colman representative.



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The SOUTHERN TEXTILE HERITAGE

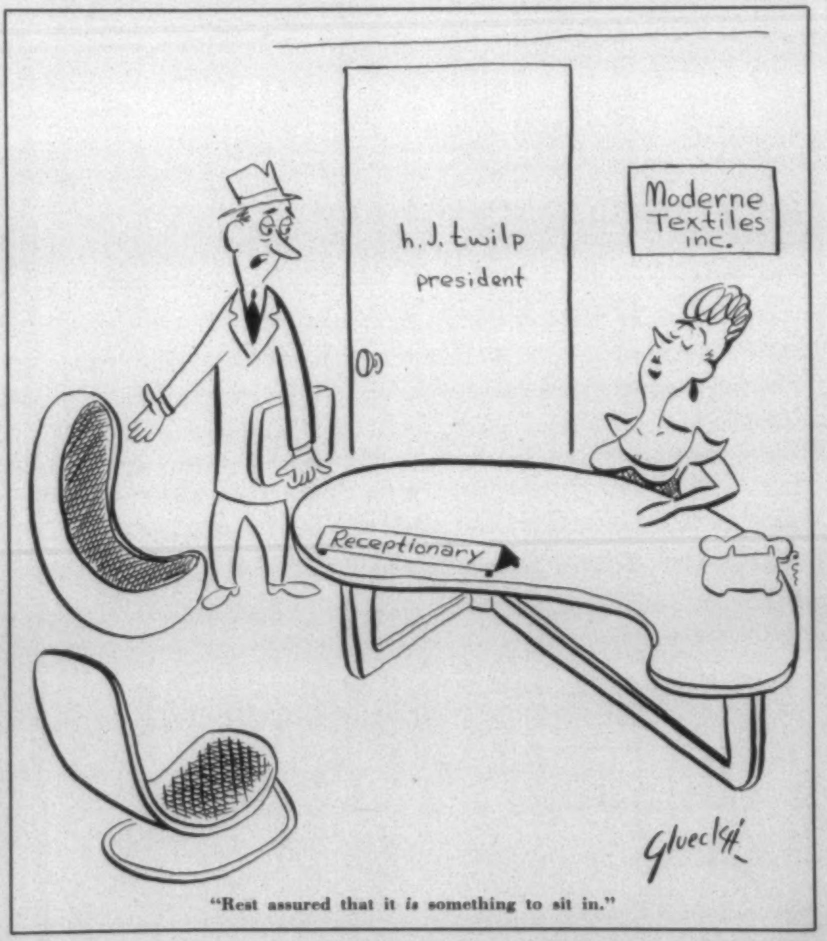
By W. M. McLaurine

— Part Five of a Series —

IN THIS series of articles, I would be negligent of a powerful and influential group of men, if I did not pay homage to the textile operating executives of the South.

My first contact with them was while I was teaching at the Georgia Institute of Technology. Then, I studied and developed certain ideas in industrial relations in industry, and J. W. Hames, then superintendent of the Exposition Cotton Mills, was kind enough to furnish me a group on which to try out my ideas. Thence I went to Bibb Mfg. Co. at Macon, Columbus and Porterdale, to John P. King Mfg. Co. at Augusta and many other places and types of industry in Georgia, and to many meetings of the Textile Operating Executives of Georgia.

Their overseers and superintendents became my friends and sold me to their executive heads so much that they (the top executives) asked me to become secretary of the Cotton Manufacturers Association of Georgia. Soon to Char-



"Rest assured that it *is* something to sit in."

lotte where I did other work which resulted in many friends in North and South Carolina. I conducted several serial conferences in Greenville, S. C., under the leadership of Louie Greet in the Parker School District.

For nearly 30 years I have been intimately associated with these people and have gloried in their evolution and growth; their loyal leadership and their technical contributions to the progress of the industry.

It would make an interesting story to relate conditions of 30 years ago and conditions today. There was for the most part a laxness, a looseness in the early days—suspicions and secrets often between departments and many mills were averse to allowing their superintendents and overseers to meet with others to discuss their problems. Jealousies of prerogative and manufacturing processes was not uncommon.

But these efforts of self improvement within the Southern Textile Association went on under the leadership of Cobb, Dennis, Gregg, Marshall Dilling (always dean of the group), L. L. Brown, Carl R. Harris, Hames, Arrington, James A. Chapman and many more that I have forgotten. Their motto appearing on their stationery was: "Our Ambition—The Most Expert Overseers and Superintendents In The World."

Their sectional, state and Southwide meetings developed their thinking and outlook upon life until today, their meetings are democratic forerunners of scientific and humane progress. Today these overseers and superintendents are real executives, trained scientifically, trained in leadership and in the many arts that are now essential.

To me as I look over the group I am inclined to believe that they have attained their goal and in attaining it, they have developed a new type of textile operating executive which in turn has developed the best group of textile employees in the world. In the textile industry, this is a new world, a successful world where people in all of their desires and capacities can develop and where there are no longer any invidious comparisons.

This changing world under the impact of science has almost revolutionized the textile industry in products and performance, in managerial outlook and demand, in sales and distribution. The political and social impact of the nation—even the world—has not let the textile industry escape.

Guesswork, hunches and blind experimentation have given place to facts and formulas. The well developed and trained mind is now a necessity. These overseers and superintendents have not been unmindful of these new needs. They have sensed them and realized that progress was and is inevitable. They realized that they must keep step

Many of the improvements in machinery, in manufacturing methods, products, are enlargements of the embryo idea of some of these operating executives. I am told that when machinery builders are about to bring out a new machine or to modify an already established machine that they frequently send their engineers to consult with a few of these top-flight operating executives before they make a final decision, and again after the new machine is built or the old machine improved or modified, it is frequently installed in a plant where these top-flight men can study it "for any bugs" that need to be removed.

Most of these present-day overseers and superintendents are practical engineers and many are trained engineers. There is no place in the manufacturing

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process of the textile industry today for stupidity or ignorance. Overseers, superintendents and workers must be intelligent and alert to all of the needs of the job.

If one could go back 30 years ago—my point of view—and compare conditions then with now, it would be very revealing. Thirty years ago the textile industry was extremely conservative from every point of view—its production and its processes, its people and its policies were rather sacred and not to be changed.

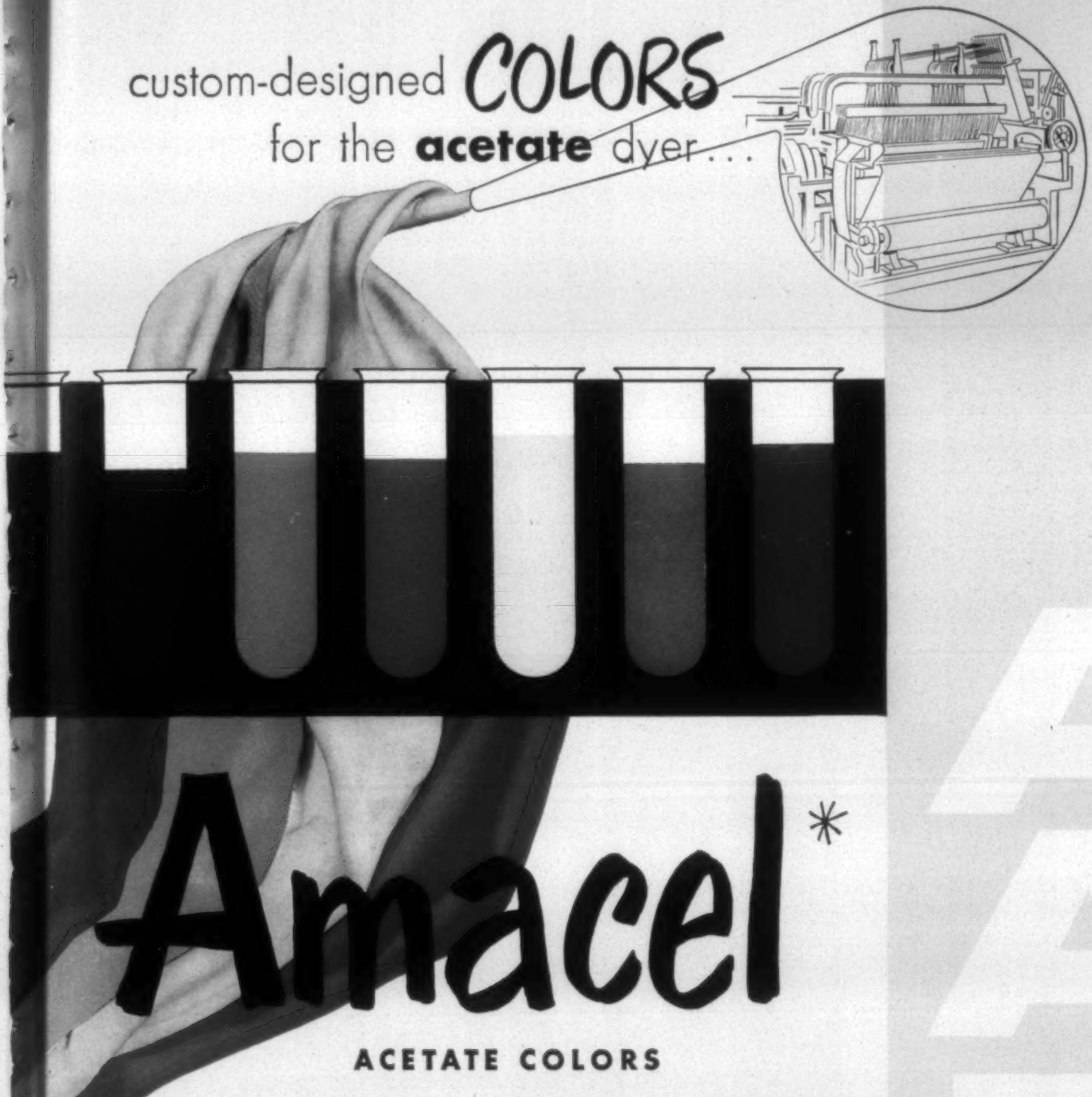
Today, nothing that needs to be changed is sacred; improvements are always being sought for and installed without hesitancy or doubt. The scientific movement has grasped the industry and its people and is giving to them an entirely new outlook upon life. Rigidity and conservatism have given place to elasticity and liberalism in products and processes.

All of these changes have been made possible and successful because of the intelligence, adaptability, elasticity and co-operation of the overseers and superintendents who have transferred these qualities to an equally alert group of workers with whom they have been associated.

These leaders have been the activators of the new progress and have assisted top-management in elevating the textile industry to one of the greatest service industries of the nation. They have assisted management through their leadership to effect a fine intelligent co-operative spirit among the workers. This has enabled the workers to enjoy a social and economic status —a joy of life and living—enjoyed by few workers in this nation.

These superintendents and overseers are the delightful result of their steady growth through the decades I have known them. These are the men whose growth has been phenomenal—these are the key men in the panorama of textile progress. But the end is not yet, we are now in the center of a chemical and electrical cycle whose centrifugal, gyroscopic whirlings may throw many more new problems to the circumference. Success is only a station in life, progress moves on. Life means change and change requires intelligence.

Sign on optometrist's window: "Eyes Examined While You Wait." Is there some other way, Doc? — *Fernandina* (Fla.) *News-Leader.*



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WATCHING WASHINGTON

(Exclusive and Timely News from the Nation's Capital)

Truman's charge of a conspiracy among steel owners not to enter into a strike settlement served to throw the whole controversy into deeper confusion. The union shop, as the remaining point of difference, was not mentioned. The charge was described in Congress as a "red herring." Meantime, wage losses of strikers were mounting at an average of $75 a week for each idle worker.

At the strike's start, Truman painted an alarming picture of the dangers to defense, and the necessity for seizure. He said his primary concern was the effect on the armed forces. But after seizure failed, and Congress adopted the Byrd-Smith Amendment telling him to use the Taft-Hartley Law, the urgency ceased, and settlement was pushed aside until Congress could adjourn and go home.

The strike was a dead loss for the 650,000 steel workers, with the pay loss running at almost $50 million a week. After several months the union leaders had not gained anything which might not have been had without a strike. The whole stupendous loss in production and in idleness was pivoted on a grim determination to win the union shop, and on a pledge given by Truman not to use the Taft-Hartley Law.

Prolongation of the strike, and even failure to settle after the Supreme Court's decision, left the union in a greatly weakened position. Congress removed the power of W.S.B. to interfere in wage disputes, and reduced it almost to a shadow. In addition, Congress made clear it does not intend to repeal or weaken the labor law, as the unions demand.

The rebellious House move to strip the Administration of its authority to control wages, or force increases, was a hard blow to both Truman and his union allies. It knocked out a lot of political underpinning. It deprived Truman of the keystone of his political alliance with Murray and the C.I.O., and equally, ability of the unions to command the strong arm of government as a bludgeoning force in wage disputes.

Such controls as are retained on prices and wages in the controls law extension will expire next April 30, and the curb on scarce materials on June 30. This is a result of a compromise forced on the House by the Senate in order to get an extension. Consumer credit controls have expired. Truman signed the extension with a broadside of criticism. He had asked for a two-year extension, and got ten months.

W.S.B. will go out of business on July 29, and all members of a new, modified board must be confirmed by the Senate. Union leaders are hot under the collar because the Senate must confirm union members, too. The new board cannot handle labor disputes, or step in to impose wage settlements. The old board expires just as it was about to allow a four-cent-an-hour "productivity rise."

The freewheeling era of unions pushing and forcing up wages at the expense of profits and stockholders is fast drawing to a close. It was an integral cog in planned economy, which has taken its hardest blow in the short

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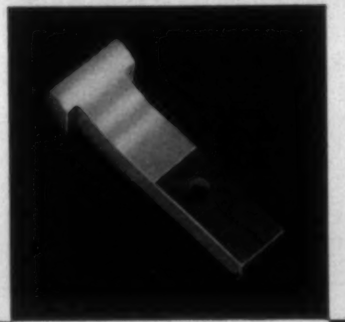

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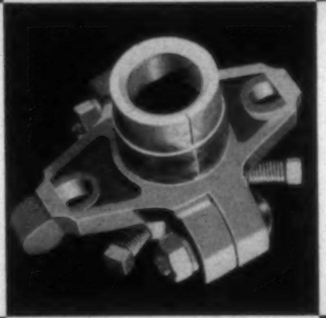

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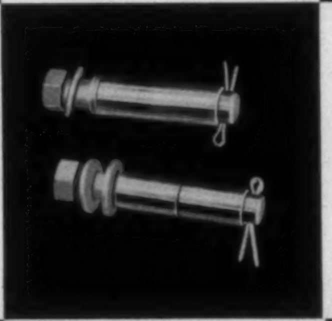

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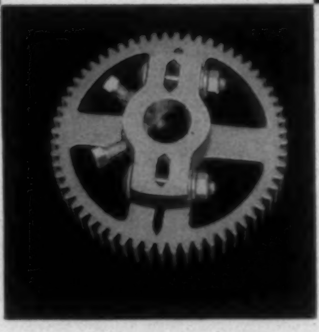

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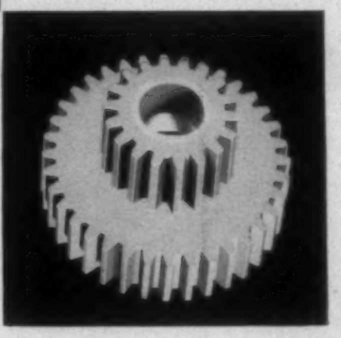

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extension of price controls. Union bosses failed in this Congress to bludgeon or brow beat their way to new legislation, which is a far cry from 1946.

Opposition ran strong in the last days of this session as to building more "flood control" dams with power plants attached. It extended even to dams claimed to have a national defense value. Such dams were called a ruse to put the government into the power business, and when filled with water for power needs, providing no flood protection.

Future dams may be largely of the "dry" type, closed when floods threaten. This would stop the loss of vast acreages of good farm lands that have been submerged. Public power proponents will offer strenuous opposition. The St. Lawrence waterway would probably have been approved if it had not had a public power project tied to it.

The Humphrey-Morse-Murray unit of the Senate Labor Committee sought in the last hours of the session to push through a bill re-establishing F.E.P.C. Senators Taft and Nixon were the sole objectors on the committee to the bill.

Truman and this unit of the Senate Labor Committee are holding up their sleeves a plan to force employers to hire new workers only in accord with a pattern laid down by government agencies. It would be wedged tightly around government contracts. It has been held back in a belief the Senate would not accept it, and the House would put it in a pigeon hole.

Acheson talked tough in Berlin, but there's a big question here whether the British and French will go along on either firmness or toughness. Both of them are nervous; the British over the Yalu bombing, and the French over German recovery. Both fear Acheson is taking a big risk of starting general war; also getting ready for another cut in U. S. foreign aid.

The Administration would like to push both the German and Korean situations into the background during the campaign. The Korean mess is expected to continue about as it is until after the election. Efforts will be made to divert attention to jobs and prosperity in this country.

House and Senate finally agreed on a military spending bill for next year covering $46.6 billion, but dropping the provision for this as a spending ceiling. Thus, $58 billion carry-over from this year is also available for spending. Differences on this bill prolonged the session for two days beyond the fixed date to adjourn.

The final spending bill is just about what Truman and the Pentagon officials wanted, and gives to them one of the largest sums of money in history. Military officials contended that many commitments have been made, upon which production has not started, based on last year's money grants. Under the new grant for next year Truman took a cut from his budget proposals of $4 billion.

Congress approved a compromise bill guaranteeing that prices on six basic crops will be supported at 90 per cent of parity in 1953. At first the Senate refused to accept the mandatory support proposal, but finally entered a compromise which allows either of two formulas to be used. Price parity is determined by the government in terms of cost of things which farmers buy.

Final version of the Social Security increase gives an increase of $5 a month, or 12 1/2 per cent, whichever is greater, to old age retired persons. Such persons are allowed to earn $75 a month in a "covered" occupation without loss of payments. "Covered" work is that which is subject to payroll retirement taxes, or to self employment in a job blanketed under the law.

Truman forces are cooking up a plan to bar States Righter delegations

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1926 Dillard Paper Company Serves the South 1952

from Southern states to the Democratic convention. It consists of sending up rival "loyal" delegations pledged to support whoever is the nominee, to contest the seats of the States Righters. The basic claim will be that States Righters are trying to deliver the South to the Republican Party.

If the Republicans had a hot and bitterly fought convention, the Democratic convention is expected to be much hotter. The issue will be straight down the line for or against Truman's policies, alliances, blunders and corruption. Truman forces hope to wean away enough Southern leaders to make it possible to bury the rest, and knock the underpinning from "the Southern rebellion."

Labor leaders ganged up in Chicago to prevent nomination of Senator Taft, and loudly said they would not support him if chosen. Led by Hutcheson, of the A.F.L. Carpenters Union, they spread the cry that he could not be elected, and that all union workers would "walk out" on his candidacy. They gave the Taft-Hartley Law as a reason.

General MacArthur's "keynote" speech in Chicago aroused Administration and other Democrats to rage and fury. They had expected attack, but no such devastating broadside as was delivered. The general's big guns hit where it hurt most. New Dealers squawked loudly that he ignored they had won four times in 20 years, and ignored the "great bulk of social and economic reforms" in that time.

Truman is expected to renew his attempt to grab the tidelands oil deposits with the adjournment of Congress. He vetoed the bill returning the lands to the states, and the Senate did not attempt to overturn the veto. The Interior Department has a plan to take over the lands, and undertake to dispose of them as federal property. Truman officials do not believe such sales could be made void in the future.

One thing beginning to cause real worry is that Truman is far overcommitted on pledges in foreign aid spending. More money, in a greater sum than any cuts this year, must either be appropriated, or these commitments repudiated. Already, it is asserted, the foreign aid spending has stripped this country to the limit in means for arming and defending itself.

Republicans are not conceded to have even an outside chance of gaining control of the Senate in the next Congress. Six of the seats becoming vacant are in the Democratic South. They hope to win four Republican seats that are vacant, but are in danger of losing three seats they have now. Very little change is expected in the political line-up of the Senate, no matter which party wins the presidency.

A coalition of Southern Democrats and Republicans in all likelihood will control both the House and the Senate in the next Congress. A new President, of either party, must work with the coalition in order to achieve any legislative program. "Civil rights" proposals will probably have no better prospects in the next Congress than in this one.

The McCarran report exposing the presence of Communists in the State Department is producing the effect that it will be harder to get a passport in the future. The department is tightening up, very tight, on who travels abroad, and suspected Communists will find it almost impossible to get a passport.

Statistics assembled by New York financial interests reveal that the number of stockholders exceeds the number of workers and wage earners in most of the largest industries. In 24 of 31 of the largest corporations, stockholders are far in excess, and for the group of 31, there were 50,000 more stockholders at the end of last year than there were employees and wage earners.

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When our group specialists in the field, and our group analysts in the home office, combine their knowledge and experience into formulating a group plan for you, you get a tailor-made, custom-built group plan, designed to meet all your requirements. Whether it be group life, group hospitalization and surgical benefits, or all of them combined into one great plan, a Pilot Planned group policy will satisfactorily cover all your insurance needs.

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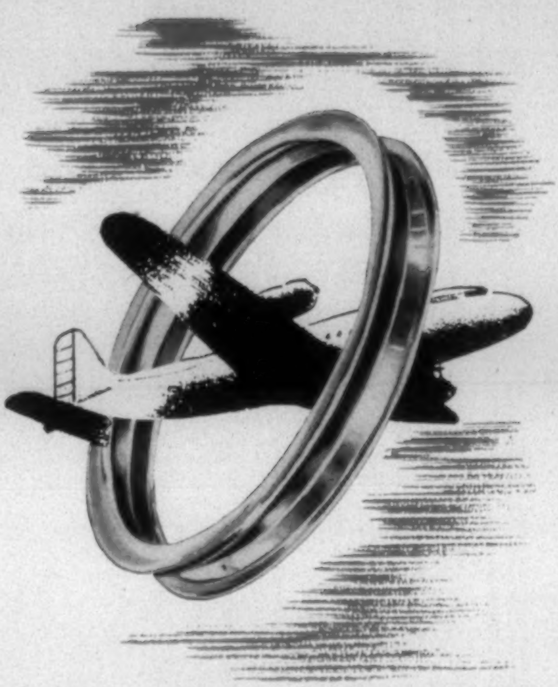

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textile bulletin

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Industries Avoid Unionized Towns

The failure of Durham, N. C., to secure new industries and the belief that industries were avoiding Durham because of the activities of local labor unions, has alarmed the citizens of that community and a meeting of community leaders was held recently at the City Hall.

Frank Pierson, manager of the Chamber of Commerce, said in a prepared statement which he read at the meeting:

> There are probably many reasons why we are not getting more plants, such as lack of available building space, high cost of factory sites, lack of city utilities in areas adjacent to the city, and of no minor importance, our reputation for being union dominated. Warranted or not, we have the reputation of being more thoroughly unionized than any county in the South. We are considered as being non-competitive in the hosiery industry, which means that mills operating here find it difficult to meet the competition of mills operating at less overhead in other cities.

Mr. Pierson emphasized that he was "not opposed to good wages" and was not "anti-union." Instead, he said:

> It is my information that this situation is also felt in other towns. Mills moving from localities where this situation exists are apt to avoid a community with a similar reputation. I am for more industries with more jobs for workers, resulting in more payrolls for Durham, and I am for expansion of our existing industry in Durham and not elsewhere. . . .

E. R. Williamson, member of the council committee, and a labor leader spoke lengthily in reply to Mr. Pierson's comments, stating that he felt Durham is not attracting new industries because "management is trying to go places where unions don't exist."

The late W. A. Erwin, president of the Erwin Cotton Mills for many years, was a man who had a genuine interest in the welfare of his employees and we doubt if employees were better treated anywhere else. The same policies, and the same interest in their employees, has been shown by his successors, the late Kemp P. Lewis, and W. H. Ruffin.

In spite of the policies and attitudes of the three men who served as president of the Erwin Cotton Mills, the employees, when unionized and ordered to strike, showed a remarkable viciousness and disregard for the rights of their employers.

Had the Erwin Cotton Mills been managed by men who had had an absolute disregard for the welfare and rights of their employees instead of by kindly men such as Erwin, Lewis and Ruffin, they could not have been more unfair or more vicious than during the several strikes which have occurred at the Erwin Cotton Mills since the employees were unionized.

No wonder industries, moving South to escape from intolerable labor conditions in some Northern communities, have hesitated to locate in Durham, N. C.

There are no doubt many fine people among the employees of the Erwin Cotton Mills and the knitting mills in Durham, but the strikes have been so vicious and the attitude of union members so unfair that we cannot escape the conclusion the textile employees of that city include an unusually large percentage of low-class people and those of the type who have no appreciation of good treatment and little regard for the rights of others.

Durham apparently had the misfortune to acquire an unusually large percentage of undesirable textile employees and industries have gone elsewhere in order to avoid them.

It is very definitely a fact that Durham had the misfortune to become the home of an unusually vicious group of labor union racketeers.

An Example Of The Telephone Racket

In our June issue in an editorial entitled "Advertising By Telephone" we called attention to the steadily growing racket of mills being solicited by telephone for advertisements which are seldom of any benefit to them.

As the result of that editorial our attention was called to a small knitting mill which had been victimized.

We visited the mill and obtained first-hand information but at their request are withholding their name.

It is a mill in which all of the owners are workers and it happens that the president is a fixer and takes no part in the office work or the finances.

A man in New York called the president by long distance phone one day, when the treasurer was absent, and stating that he represented a certain organization, solicited an ad.

When the president stated that the treasurer handled all matters of that kind, the solicitor became very insistent and almost insulting but the president stood his ground and refused to authorize the advertisement.

In spite of the fact that the president was only a fixer in a knitting mill he had the "guts" to say no and thereby set an example to some mill officials who are supposed to be business men but now have their names firmly established on, one or more, sucker lists.

In spite of the president's refusal, a bill for the advertisement was received a few days later and that was followed by other long distance calls from New York and implied threats.

The mill finally paid the bill rather than risk having to defend a suit.

While the president knows that he absolutely refused to

WHICH costs more... the painter or the paint?

The famous Barreled Sunlight "on-the-wall" test lets you see with your own eyes why the true yardstick of paint value is not price per gallon but *cost per square yard* for material and labor. Men responsible for volume paint purchases in leading industrial plants and other large buildings have seen it and been convinced. May we show it to *YOU?*

As anyone connected with industrial maintenance knows, the cost of *labor* is *at least* 80% of total painting costs.

So, it figures that any paint that slashes labor costs saves *real* money on any paint job.

Barreled Sunlight Paints may cost a little more . . . but they save *big* money where the *big* money goes . . . and they save four important ways on paint costs. Here's how:

1. Barreled Sunlight takes more thinner — and that means more paint ready for use and, actually, lower material cost.
2. Furthermore, Barreled Sunlight "hides" better — even after thinning, Barreled Sunlight often does a "bang-up" job in one coat where ordinary paint calls for two.
3. What's more, Barreled Sunlight covers more square feet per gallon — takes fewer gallons than other paints to do the same job.
4. And finally, Barreled Sunlight goes on faster... easier...this easier "flow" of Barreled Sunlight cuts painting costs . . . saves painter-hours.

Claims are easy to make . . . but we *prove* 'em.

An actual "on-the-wall" test — right in your own plant — will *prove* the cost-cutting features of Barreled Sunlight. For proof you can *see*, write Barreled Sunlight. Our representative will be glad to arrange the test — at your convenience and absolutely without obligation. Write today.

BARRELED SUNLIGHT PAINT COMPANY
5G Dudley St., Providence, R. I.

Barreled Sunlight
Paints®

In whitest white or clean, clear, wanted colors, there's a Barreled Sunlight Paint for every job

IT ALWAYS COSTS MORE NOT TO PAINT!

For over half a century those who know the best in paints . . . for all types of buildings . . . have strongly insisted on famous Barreled Sunlight authorize the advertisement, the solicitor insisted that it had been authorized.

One of the reasons why the solicitation by telephone racket has been established is that there is no record and the solicitor is free to credit authorizations to the mill representative and to deny any statement about circulation or connections which he, the solictor, has made.

There are many journals and newspapers which solicit advertising and have the circulation and connections which justify mills in spending money and no legitimate publication will object to stating in writing the amount of its circulation or giving proof that it is affiliated with the organizations or movements which they claim.

The mill manager, being solicitated for advertising over the telephone, should signal a stenographer to record his end of the conversation and all agreements to take advertising should be conditioned upon the solicitor mailing a statement of circulation and proof of the affiliation of the publication with organizations as alleged by him.

There are certain mill managers who are never solicited by telephone because the publication racketeers know that a telephone call would be a waste of money.

There are other mill managers, some of them highly rated as manufacturers, who are on every "sucker" list.

There are many publications which can prove their circulation and also that they can render real service to an industry or a cause.

None of them will refuse to state the circulation of their publication and furnish proof of their authorized affiliations.

There are racketeers with fly-by-night publications which exist solely for the purpose of selling advertising and they seldom print many more copies than necessary to send to advertisers.

The cotton manufacturer who buys cotton upon the basis of grade or the knitter who purchased yarn of a recognized quality, should refuse to purchase advertising in a publication without a guarantee of circulation or accept as a fact statement of affiliations made over a telephone but of which no proof has been given.

TEXTILE INDUSTRY SCHEDULE

— 1952 —

Aug. 22-23—Summer outing, **SOUTH CENTRAL SECTION, A.A.T.C.C.**, Chattanooga (Tenn.) Golf and Country Club.

Sept. 10-11—Fall meeting, the **FIBER SOCIETY**, Princeton, N. J.

Sept. 13—**PIEDMONT SECTION, A.A.T.C.C.**, Charlotte (N. C.) Hotel.

Sept. 13—**SOUTHEASTERN SECTION, A.A.T.C.C.**, Biltmore Hotel, Atlanta, Ga.

Oct. 3—**TEXTILE QUALITY CONTROL ASSOCIATION**, Raleigh, N. C.

Oct. 6-11—**SOUTHERN TEXTILE EXPOSITION**, Textile Hall, Greenville, S. C.

Oct. 16-17—Annual meeting, **NORTH CAROLINA COTTON MANUFACTURERS ASSOCIATION**, The Carolina, Pinehurst, N. C.

Oct. 20-24—**NATIONAL SAFETY CONGRESS AND EXPOSITION**, Conrad Hilton, Congress, Morrison and Sheraton Hotels, Chicago, Ill.

Nov. 6-8—**AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS TEXTILE DYEING AND FINISHING EXHIBIT, AND NATIONAL CONVENTION**, Statler Hotel, Boston, Mass.

Nov. 15-21—Annual meeting (as part of a six-day cruise to Bermuda from Norfolk, Va.), **CARDED YARN ASSOCIATION** and **SOUTHERN COMBED YARN SPINNERS ASSOCIATION**.

Nov. 17-18—Annual meeting, **TEXTILE RESEARCH INSTITUTE**, Hotel Commodore, New York City.

Dec. 1-6—**NATIONAL EXPOSITION OF POWER AND MECHANICAL ENGINEERING**, Grand Central Palace, New York City.

Dec. 6—**SOUTH CENTRAL SECTION, A.A.T.C.C.**, Hotel Patten, Chattanooga, Tenn.

— 1953 —

Jan. 19-22—**PLANT MAINTENANCE SHOW**, Celveland (Ohio) Auditorium.

Feb. 18-20—**COTTON RESEARCH CLINIC**, General Oglethorpe Hotel, Savannah, Ga.

March 26-28—Annual convention, **AMERICAN COTTON MANUFACTURERS INSTITUTE**, Palm Beach Biltmore Hotel, Palm Beach, Fla.

May 14-16—Annual outing, **CAROLINA YARN ASSOCIATION**, The Carolina, Pinehurst, N. C.

June 18-20—Annual convention, **SOUTHERN TEXTILE ASSOCIATION**, Mayview Manor, Blowing Rock, N. C.

June 29-July 3—Annual meeting, **AMERICAN SOCIETY FOR TESTING MATERIALS**, Chalfonte-Haddon Hall, Atlantic City, N. J.

Sept. 17-19—Annual national convention, **A.A.T.C.C.**, Conrad Hilton Hotel, Chicago, Ill.

— 1954 —

April 26-May 1—**AMERICAN TEXTILE MACHINERY EXHIBITION**, Atlantic City (N. J.) Auditorium.

June 10-12—Annual convention, **S.T.A.**, Ocean Forest Hotel, Myrtle Beach, S. C.

Annual convention, **A.A.T.C.C.**, Atlanta, Ga. (Dates not yet selected.)

Tain't Funny

In the past few weeks, some leaders of the United Textile Workers (A.F.L.) have shown the textile industry how to successfully tweak the nose of the Textile Workers Union of America—a feat that hasn't been accomplished very often

It might be profitable for textile executives to make keen note of what is going on. For in past years, most mill owners and officials have sat placidly by while many T.W.U.A. propagandists and officials have issued false statements and hurled libelous charges.

Faced with a somewhat similar situation, the U.T.W. has taken direct action. When C.I.O. organizers allegedly harrassed the U.T.W. in North Carolina by trying to get into U.T.W. meetings and hindering operations of the A.F.L. union, the U.T.W. promptly brought a $100,000 damage suit suit against the T.W.U.A. and some of its top brass.

And when T.W.U.A. officials allegedly began passing out leaflets, which charged a U.T.W. official with stealing union funds, that official brought a $100,000 libel suit against the T.W.U.A. and some of its officers.

There is no way of determining the merits or demerits of the case. That is a question for the courts to decide. But the action by the U.T.W. highlights one significant thing: no one has to stand idly by if he believes he is being illegally harassed, libeled or injured by a union. There are laws against this and there are courts to enforce the laws.

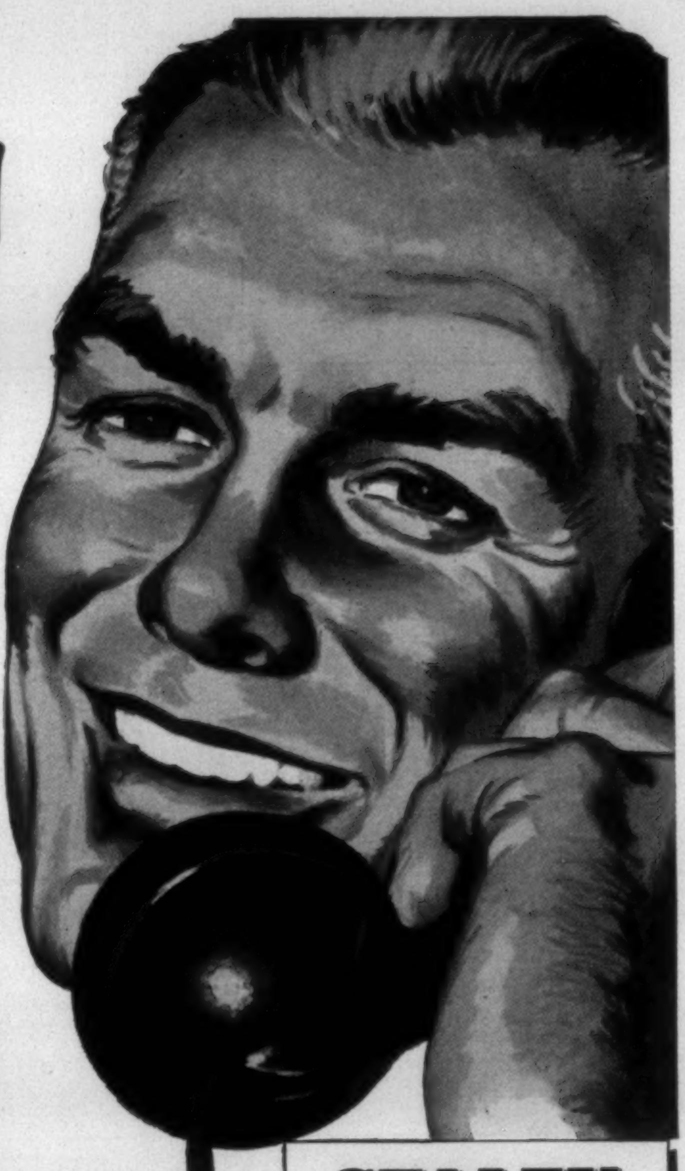
If the U.T.W. can seek protection in the courts, so can the textile industry when it feels it's being maligned by unionists, no matter whether they are A.F.L. or C.I.O.

Eisenhower And Nixon

While we had hoped to see Robert A. Taft rewarded for his long service and leadership in the Republican Party by being given the nomination for President, we feel that the ticket of Eisenhower and Nixon will probably prove to be a wise choice.

Every statement made by Dwight Eisenhower since his return from Europe has been pleasing to those who have

"I've discovered a new, better rayon sizing!"



New STA·GEL Sizing increases efficiency on difficult rayon weaves

Staley's new sizing makes possible new efficiency on difficult constructions . . . ends many of the troubles common to rayon weaving. While primarily compounded for use on spun rayon mixtures, it gives equally satisfactory results on combinations of spun rayon with acetate rayon, wool, cotton and other staple fibers.

Important rayon mills now using *Sta-Gel*, report these advantages:

SMOOTHER, TOUGHER SIZE—Each fiber is protected by a smoother, more rugged size. "Fuzz balls" are fewer . . . difficult constructions easier to weave than ever.

MORE STRENGTH AND BINDING POWER—*Sta-Gel* binds the wild fibers to the body of the yarn adding extra strength and weavability.

REDUCES SHEDDING—*Sta-Gel* reduces shedding appreciably in mill operation.

IMPROVED LOOM EFFICIENCY—Gives you outstanding loom efficiency on your most complicated spun rayon weaves—lower percentage of seconds.

EASIER DESIZING—*Sta-Gel* desizes perfectly by any conventional desizing method.

COSTS LESS—*Sta-Gel* goes farther, you can cut your size consumption noticeably, and get lower cost sizing for all types of weaves.

A. E. STALEY MFG. CO. • Decatur, Ill., U. S. A.

Another Staley Development For the Textile Industry!
STA-GEL
THE NEW TYPE, HIGH EFFICIENCY
SPUN RAYON WARP
SIZE
for
SPUN RAYON
and Mixtures of Staple Rayon with other Fibers
Makes Difficult Constructions Easy to Weave!

STALEY

Staley PRODUCTS

Research Pioneers in Products from CORN and SOY BEANS ®

IF YOU'RE NOT ALREADY USING *STA-GEL*—get all the facts about this new type rayon sizing. *Write today!*

THERE IS A SUPERIOR QUALITY
STALEY STARCH FOR EVERY TEXTILE NEED

STA·GEL®

Staley's New High Efficiency Spun Rayon Sizing

Dependable Service from

Atlanta, Ga.
Boston, Mass.
San Francisco, Calif.
Spartanburg, S. C.
Chicago, Ill.
Decatur, Ill.
New York, N. Y.
Philadelphia, Pa.

been looking for a different type of administration in Washington.

In order to show that he was as good a Republican as Senator Taft, Eisenhower said in one statement:

> My roots are deep in Republicanism. As a boy in Kansas, we used to talk about the Democrats as we would about the town drunk.

One thing we do not like about Dwight Eisenhower is that he is a brother of Milton Eisenhower, who was first lieutenant to Henry Wallace and stayed away out in front of most New Dealers.

Milton Eisenhower was so far out in front that he was regarded as a near-Communist and he is said to have much influence with brother Dwight.

We have the idea that the selection of Senator Richard Nixon as candidate for vice-president was to show that there would be an influence to counteract that of Milton Eisenhower.

Senator Nixon led the fight to have Alger Hiss punished and has always been outspoken against Communistic influences.

With the exception of Senator Russell, who, because he is from the South, has little chance to secure the nomination for President, the Democratc candidates can only be classed as a "sorry lot."

When one looks at such candidates as Estes Kefauver and W. Averill Harriman, he wonders if they would be any improvement over Harry Truman.

We feel that it would be possible to go into any town of 25,000 people and pick at least five men who would be better qualified to be President of the United States than Kefauver and Harriman.

The important thing is to see that Harry Truman, and all who have been closely associated with him, are thrown into the political junk pile.

One Hundred Years

It has been exactly 100 years since any citizen of North Carolina has been named on a presidential ticket.

In 1852 William A. Graham, Governor of North Carolina, United States Senator, Secretary of the Navy and grandfather of David Clark, editor of TEXTILE BULLETIN, was nominated for the vice-presidency on the Whig ticket with Winfield Scott. They lost to Franklin Pierce.

From 1852 to 1952 no citizen of North Carolina has had the slightest chance of being either president or vice-president of the United States nor will one have a chance until the electoral votes of each state are divided in proportion to the votes cast for presidential electors.

The entire electoral vote of New York, Ohio, Illinois or any of the other large population states, now goes to the candidate for president who receives the majority of the vote in that state and the majority need not be more than one.

Such a system means that an organized minority, even though it be small in numbers, could throw the electoral vote of a state one way or another and that gives organized minorities great power.

Were it possible to divide the electoral vote of each state in proportion to the vote cast for each candidate for president, organized minorities would have influence only in proportion to their numerical strength and that is as it should be.

A bill to submit to the several states a constitutional amendment to permit the electoral vote to be divided upon a numerical basis passed the United States Senate last year but was overwhelmingly defeated in the House.

Under the present system of allowing the entire electoral vote of a state to go to the candidate who obtains a bare majority means that no man living in a small population state has any chance to be president or vice-president of the United States and another 100 years will pass before any citizen of North Carolina has any chance to be either president or vice-president of the United States.

1952 Southern Textile Exposition

The 1952 Southern Textile Exposition, which will be held in Greenville, S. C., the week of Oct. 6, will be staged in a substantially enlarged and far more attractive setting.

With two permanent additions fronting on Washington Street, Textile Hall, which has been "bursting at the seams" at past shows, now provides over 8,000 square feet of additional floor space. One of the new additions, which measures 74 by 108 feet, adjoins Textile Hall proper and is entered through a fire corridor, from which stairs lead to the second floor of the main hall. This addition replaces one of the temporary annexes and connects with the remaining annex.

Just across a driveway, which was left open to facilitate the unloading of exhibits, is the other addition, measuring 62 by 48 feet. The two additions, both one-story and of brick and steel construction, will be connected with an enclosed passageway prior to the show's opening. Large exhaust fans and modern lighting have been installed in these buildings.

The executive offices occupied by James H. Woodside, president, and Miss Bertha Green, secretary of Textile Hall Corp., and other members of the staff, have been completely rearranged and redecorated. The lobby also has been "dressed up," with an accoustical ceiling, new doors to the main hall and improved lighting numbered among the improvements.

A concrete loading platform is being erected at the rear of the main hall and the unsightly boarding on the back of the building will be replaced with brick.

Textile Hall Corp. has purchased the lot immediately at the rear of the annex and extending back to the next street, to provide easier access to the hall. Total cost of all improvements will be approximately $75,000, according to Mr. Woodside.

All of the exhibit space has long since been sold. With few exceptions, the companies that were represented at the 1950 exposition have engaged space again this year and quite a few manufacturers will make their first appearance at S.T.E. At least two large manufacturers of textile machinery will have moving exhibits for the first time since the exposition was cancelled in 1946. It will probably be the most diversified show in the history of this event, with over 240 companies participating.

Incidentally, the management this year will supply exhibitors with badges carrying their names and firm connections. As in the past, TEXTILE BULLETIN will publish bulletins at frequent intervals each day of the show, listing the names of mill men attending.

Reiners, Reiners EVERYWHERE!

In many leading mills near and afar, our Tricot machine is producing 2- and 3-bar quality fabrics in 'round the clock operation. It has earned a fine reputation for excellence, versatility, and flawless, trouble-free production of *Tricot at its Best.*

We are building more Tricot machines than all other makers combined. In addition, we make Raschel, Simplex and Kayloom machines, also Warpers and Creels—in short, warp knit mill equipment from cone to knitted fabric.

Write for richly illustrated catalogs.

ROBERT REINER INCORPORATED

TELEPHONE: UNion 7-0502, from New York City call LOngacre 4-6882

550-564 GREGORY AVENUE, WEEHAWKEN, NEW JERSEY

DARY
Ring Travelers

Meet Changing Needs!

When you're working out change-over problems, talk with a Dary representative. He'll contribute experience we've acquired in over 50 years of co-operation with mill men.

You'll find there is a Dary Traveler for twisting and spinning any type or count of yarn —cotton, wool, worsted, silk or any synthetic or blend. Let us help you select the right Dary Traveler for the job it was engineered to do right!

Specify DARY Ring Travelers every time!

DARY SYMBOL OF SUPERIORITY PROCESSED

THE DARY RING TRAVELER CO.
TAUNTON, MASSACHUSETTS
LINDSEY I. PHILLIPS, TREASURER, TAUNTON, MASS.
JOHN E. HUMPHRIES, BOX 843, GREENVILLE, S. C.
JOHN H. O'NEILL, BOX 720, ATLANTA, GA.
JAMES H. CARVER, BOX 22, RUTHERFORDTON, N. C.
CRAWFORD RHYMER, BOX 2261, GREENVILLE, S. C.

WHAT OTHERS ARE SAYING

Wool: Its Future

THE demand for textiles is increasing at a tremendous pace. The average per capita consumption of wool in the United States for the five years following World War II represented an increase of 73 per cent over the average for the five-year period just prior to the war. This compares with an increase in the same period of only nine per cent for the world. Increased population and improved standards of living were responsible for the increase here. The rest of the world has had its increase in population and it only remains for improved living standards to create greater world-wide increases in the demand for textiles.

The supply of natural fibers cannot possibly keep pace with such an enormous increase in demand. There are limitations in available lands, in farm labor, and in sheep herders. There is plenty of room for enormous expansion in new fiber uses and, with the increasing interest in special garments for particular purposes, we have numerous fields in which the quality patterns of each new fiber may be used with profit.

Such a background provides an ideal opportunity for the orderly development of new products along with full utilization of the old. Furthermore, it gives an ideal range of trial markets to enable each fiber to find its place, as will happen in the end anyway.

All of this brings me to the economics of the wool industry. At almost any other time in history I could discuss wool without reference to other fibers. Unfortunately we are living in the age of Madison Avenue, the advertising spread, and the press reception at the Waldorf. The manufacturer and the consumer are befuddled with conflicting claims and many of these claims are tied in with predictions of the destruction of wool markets.

The reason for this is obvious. Yellow journalism long ago discovered that stories of theft, murder, and disaster met a reader demand that far exceeded the interest in progress, construction, and good works. It is not enough to announce the characteristics of a new fiber and where it might best fit. It seems to be felt that public interest can only be stirred up by claims that the advent of a new fiber will destroy millions of investments and make useless the crafts developed through generations. In some cases the estimate of the usurpation of the wool market is made before the new fiber is available in commercial quantities.

As others have been so articulate in predicting the doom of wool, we can only examine the background of their predictions. Part of this background rests on the premise that the new fibers are already proved to be so good that they will gobble up the wool market. I've been assiduously studying the claims for synthetic fibers. I am fully cognizant of the fact that they fulfill certain useful functions and they will find their logical uses according to their performance for actual service. I have made myself a one-man guinea pig to test them.

In this work I've found many of the specific claims are justified but along with the properties that fulfill these claims I have found certain "hidden qualities" which do not seem to be featured in the advertising. As a consumer I had certain conditioned ideas about what constitutes basic qualities to be expected in all fabrics. My work as a guinea pig has forced me to considerably edit this understanding, so that now I am prepared for almost anything. I've bought miracle socks—and caught cold walking around with puddles in my shoes while the dye came off to stain my feet. I've bought miracle ties from which I could easily wash off the breakfast egg—only to see lint attracted and held fast to give a startling mottled effect. I bought one miracle shirt, to take me through a long business trip, because I could wash it myself each night—and threw it away because that was the *only* way I could get it washed with safety and I was fed up with doubling as a laundress. I invested in a miracle blanket to see how easily it washed, how much it shed—and then blanked out my radio with static. I bought a miracle suit, a two-button number that I could wear swimming (don't ask me why) —but on my first encounter with a heavy mist it sucked the water through to my skin with chilling efficiency. I continued to wear it to see how the crease stood up—while I developed

1200 Pounds Production Per Hour

Battery of Cocker Slashers in a Southern Mill

These Cocker Slashers have several exclusive features which make them far superior to other machines. These are:

❶ Differential Friction Compensating Control, which allows continuous high speeds without heating of Friction. This, combined with heavy construction which minimizes vibration, enables them to out-produce other type slashers.

❷ The New Cocker Friction, which produces hard beams and gives 20% to 25% more yarn per loom beam.

Cocker Slashers have all of the other features required for fast and accurately controlled production . . . among which are graduated drives which permit changes in speed without overrun of beams or strain or jerk on the yarn, push-button control throughout, and finger-tip tension control.

Cocker Slashers are made with 7, 9, and 11 Cylinders and are unexcelled for cotton, spuns, filaments, and other type yarns. Write or wire for full information.

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Machine and Foundry Co., Gastonia, N. C.

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Look...

No Sharp Corners

No Sharp Edges

. . . smooth Inside and Out

. . . and permanently smooth! No snagged hands, no damaged yarn, and no danger of cutting, tearing, or gouging machinery or work.

Excel Utility Truck No. 1300

This EXCEL No. 1300 Truck is made of heavy 16 gauge non-rustable galvanized iron, metal locked and riveted, to outlast any ordinary truck.

Made to customers' specifications.
Thousands already in use.

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EXCEL
Textile Supply Co.
"Excel Trucks Excel"
LINCOLNTON, NORTH CAROLINA

pills on the trousers under the coat and my pipe ashes melted holes in the lapel—but when the tailor finally got the suit to press he glazed the finish. Remembering the swimming pool, I tried to wash it—but the lining shrank and the seams puckered. The fabric might have been washable—if I wore it as a sarong, but even a guinea pig has his limits.

As a tentative conclusion to all of this I have decided that when the claim "as wooly as wool" or even "more wooly than wool" tempts me to re-enter the looking-glass world of miracles, I shall also look for the hidden qualities, for problems of static, lack of absorbency, melting, cleaning, ironing, dyeing, finishing, and tailoring.

Time and good engineering may solve many of these problems. I hope that they do and that such improvement comes with sufficient rapidity to take up the increased demand of increased population. It is sufficient that by 1980, barring any successful attempt at self-annihilation, there will be one billion more people to clothe—an increase of 40 per cent.

The second basis for the dire predictions of the fiber morticians rests on history—so let's examine that. You have all heard the stories of silk and natural rubber. Wool, they say, is going the way of silk and natural rubber. But let us point out that rayon was first developed to replace silk. It did not. It found its worthy place in many other uses which were not considered in the original promotion. Silk hung on in spite of a much closer competitor, nylon, and did not drop off the market until it was made unavailable because of lack of supply when the war cut off shipments from the Orient. Right now, in spite of a controlled high price, it is being brought back in men's suits.

And natural rubber. Synthetic rubber was developed to replace natural rubber that was also cut off from supply. In some uses it has been found to be superior to natural rubber, yet recently it was necessary to legislate restrictions on the use of natural rubber to conserve what we had—after some 12 years' experience with the synthetic type.

Leaving these special cases, let us consider the natural and synthetic fibers as a whole. We have some 30 years of experience to look at. Between 1920 and 1951 the U. S. consumption of all man-made fibers increased from almost nothing to 1,480,000,000 pounds per year. But in the same years the natural fiber demand increased by about 2,232,000,000 pounds, or about one-and-a-half times as much. Of this increase, cotton alone, which during this period was claimed to be the most seriously jeopardized, increased in consumption by 2,080,000,000 pounds, or more than the increase in all man-made fibers together. Does history or precedent substantiate the predictions of disaster, or does it indicate that there is room for expansion in total fiber supply?

Barring temporary peaks, as for example sudden military demands or short-term buyers' strikes, the present world supply/demand position of wool is in approximate balance. At the moment the effort is toward increasing the supply of wool to meet expected demands in the year to come. Australia has increased her supply by 12 per cent since 1934-38. She hopes to increase her production further in the next few years through improving her now unused semi-arid pastures. In the United States production has dropped 43 per cent during the past ten years. However, present planning is to increase it by at least 75 per cent by 1960.

The wool industry has been with us a long time. The fibers and the products made from them have been developed through actual experience over many generations of service. The consumer knows what to expect from it. We expect that it will be with us for a long time to come.—*Giles E. Hopkins,* technical director, the Wool Bureau, Inc.

Cotton Legislation

THERE are always two or three members of the Congress, who busy themselves with the task of writing and introducing bills that will raise the price of cotton. Of course when a man is successful in getting himself elected as a member of the House of Representatives or of the United States Senate, he immediately feels that he must do something to justify himself, or to make good to his constituents. This may be one of the reasons why there are virtually always one or more bills before the Congress which are supposed to be for the benefit of the cotton industry.

Of course there is always the possi-

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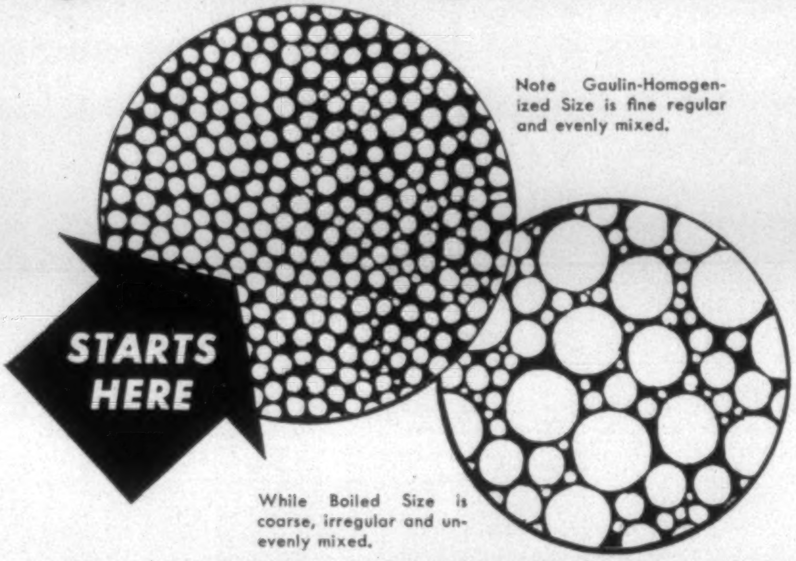

Note Gaulin-Homogenized Size is fine regular and evenly mixed.

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It's finer Gaulin-Homogenized size particles penetrate yarn lightly but evenly — bond fibers together smoothly, firmly . . . without coating or matting and making them brittle. The result — a more elastic yarn that SHEDS LESS . . . and BREAKS LESS at the loom and slasher.

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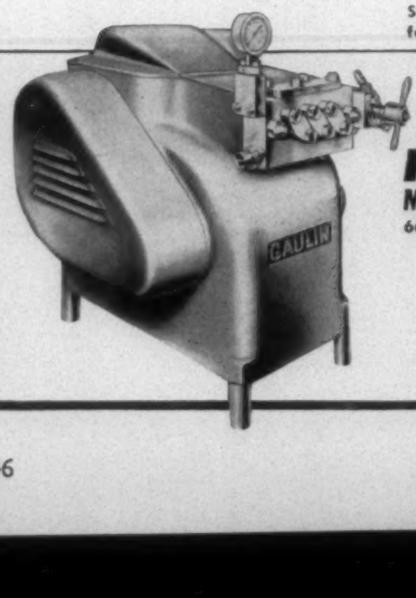
See your local Manton-Gaulin representative for details and other advantages.



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bility that the senator or congressman also has his eye on his re-election, but even so, it is passing strange that no one in the congress appears to ever give a thought to the real difficulties that are faced by the cotton industry.

Latest attempts at legislating prosperity for the cotton producers is being sponsored by Senator Ellender of Louisiana. Senator Ellender has introduced a bill, which, in a nutshell would raise the support price on cotton from its present rate of 31.96 cents per pound, to 36.26 cents per pound. The bill, which naturally originated in the House, is known as the Abernathy Bill. It is contingent upon a crop of 16,000,000 bales being raised. In other words, if the Crop Reporting Board, as of Aug. 1, finds that the cotton crop is going to be 16,000,000 bales or more, and if the Abernathy Bill should become a law, which is exceedingly doubtful, then the support price on cotton would automatically be raised from 31.96 to 36.26.

While it was only a few short months ago that there were those in Congress who were determined upon making an investigation of the Crop Reporting Board, as a result of its performance last year, when they were as wide of the mark as is usually the case with a horse bettor, nothing in the Abernathy Bill indicates that the proponents of the new legislation feel that there is the slightest chance that the Crop Reporting Board could be wrong a couple of million bales, which was the case last year.

Of course almost no one in the cotton trade believes that the nation will produce a crop of 16,000,000 bales. Naturally, no one knows at this writing what the acreage will total, but it is known that there will be a fairly large abandonment, and adverse weather conditions over much of the cotton belt, all go to indicate that the acreage will be little if any larger than last year, and possibly may be smaller, with an outlook for yield that would indicate little chance of a large cotton crop.

But this does not deter those members of Congress who are forever busy with bills to protect the cotton industry, from going ahead with their plans for legislation that will control the price of cotton. If such legislation fails to prove of value as a protector of the producer, or even if it does them harm, the mere fact of trying to do something may result in garnering a good many votes, when it comes time to report to the constituent and ask for a vote of confidence.

What is really the matter with the cotton industry has little or nothing to do with the price of cotton. In fact, like everything else that the citizen has to purchase today, the price is too high, and as a result price resistance in goods made of cotton has been felt over a period of several months.

The cotton industry needs more markets. It needs more and more research. It needs to have more and more money spent to bring about more and more consumption of cotton.

It is true that we have the National Cotton Council, an organization that has without question done more for the cotton industry than any other organization in history. But what it has done, the money that it has obtained and spent, has been a mere pittance as compared to the actual needs.

This fact is so well recognized that there seems little doubt that many members of Congress, if not a majority of them, would agree with this thesis.

Nevertheless, when legislation is introduced to correct the supposed evils in the cotton industry, it has to do with controls of prices or productions of some sort. No senator, no congressman that we know of, has ever got up on the rostrum, nor has he had the intestinal fortitude to introduce legislation that would make available three or four million dollars, or even more, to really go to town in finding more and larger markets for cotton.

True, there are government sponsored laboratories, which are partially government financed by the federal government, but the money that they spend, when measured against the money that Congress is willing to spend for controls of all sorts, becomes a mere pittance.

Raising support prices on cotton will never be the answer to the cotton producer's prayers. What he wants, and what he needs, is a chance to produce as much cotton as he can economically produce, and have a market for that cotton. When this day comes, if it ever does come, the cotton industry will be out of the woods.—*Cotton Digest.*

Textile Exports

THE textile industry has seen domestic tariff on its products whittled away since reciprocal trade agreements were first broached in 1933, and

Stehedco and Southern

BRANDS THAT MEAN PROTECTION FROM WARPER BEAM TO CLOTH ROLL

100 times out of 100, during the weaving process, warp yarn touches metal while travelling from Warper Beam to Cloth Roll. Susceptible to chafing, jagging, and marking, yarn requires equipment of the most superior design, raw material, finish and polish to eliminate the costly breakage that can only result in the risk of 'Seconds' or 'Rejects'.

Top quality runs . . . Firsts can only be assured by using top quality loom harness equipment. Preferred by nine out of ten mills, STEHEDCO and SOUTHERN with their years of research and experience have made it possible to TRAVEL YOUR YARN FROM WARPER BEAM TO CLOTH ROLL WITH THE FULLEST POSSIBLE PROTECTION ATTAINABLE TODAY.

SERVICE . . . from five large strategically located plants, engineering staffs and mill trained field representatives conversant with mill problems and understanding the importance of equipment and product performance are ready to serve you . . . just phone, write, or wire.

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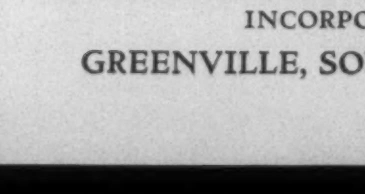
DONE FOR and DISCARDED

BUT only after 15 months' use. 207 picks per min. 2 shifts per day

COST PER LOOM HOUR—.0004c

That's the sort of service Champion Endless Check Straps give — close to 80,000,000 picks. Some give more — some less, depending on conditions — but you can *always* count on Champion to better the service record of any other brand. Expertly made from the finest imported steer hide money can buy.


CHAMPION

ENDLESS CHECK STRAPS

W. D. DODENHOFF COMPANY
INCORPORATED
GREENVILLE, SOUTH CAROLINA

now a grave charge has been lodged against the government by the president of the Textile Export Association of the United States.

Harold N. Pratt, the association head, goes further than pointing out the government has failed to secure a single concession from any of the countries with which it has negotiated treaties. He claims there is a feeling in some government circles the textile industry is not really entitled to export trade.

If this charge be true there are some wrong-thinkers in Washington on this score. They should realize that the manufacture of a dollar's worth of cotton goods affords more employment than the manufacture of a dollar's worth of almost any other necessary product.

There seems absolutely no logic to decide to suddenly scrap an export business of many years. The U. S. has long exported cotton and cotton textiles.

Surely a decision to turn entirely to other types of goods for future foreign trade would not be based on politics. Someone with a dislike for the cotton-growing and textile-producing areas could take a stab at those areas if they were in a position to brush aside the export business. But surely this is not entering into any decisions.

In all probability it is an honest mistake being made on the part of someone's thinking if textiles are not to be given proper consideration in trade agreements. The textile industry is one of the oldest and is certainly a well-established business on the American scene. There is every reason it should remain so.

The government should take proper care, therefore, to see that the export market of textiles is retained for the U. S.—*Greenville* (S. C.) *News.*

One of the political facts of life, as evident in the U. S. as elsewhere, is that the further left a government goes, the less there is left.—*Nashville* (Tenn.) *Banner.*

Of one Democratic possibility an observer says he doesn't seem to know if he is pitching or catching. How different was the late F.D.R., who did both, while also taking second.—*The State,* Columbia, S. C.

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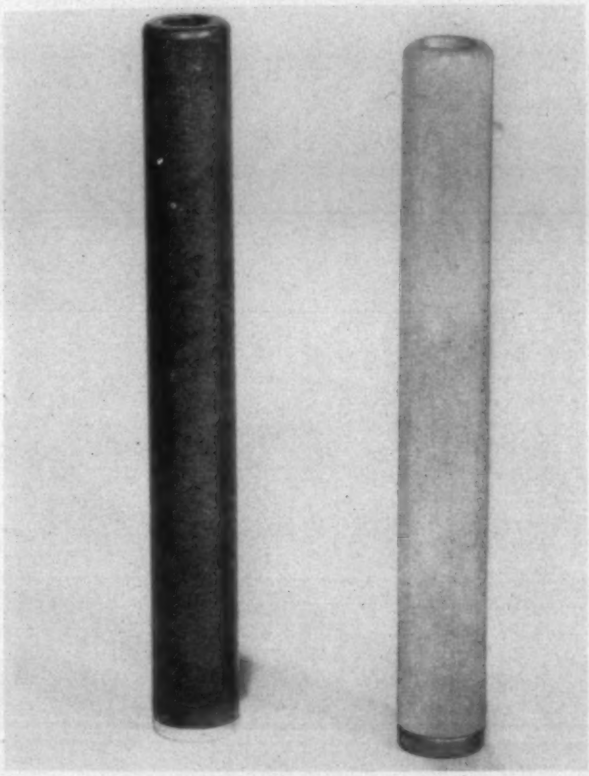

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For Node Spinning

Designed for Saco-Lowell
GWALTNEY Spinning Frame

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SHUTTLE FUR— Supplied by R. M. Taylor Company—Reliable—Dependable.
We can supply you with any quality or density you require.
Send trial order today with sample of fur you are now using.
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Stein Hall has been working with textiles for many years, endlessly testing under expert supervision in controlled laboratories. Our success is measured by the efficiency of the operation in *your* plant. The benefits of our 86 years of experience are yours for the asking. For any textile problem, call for one of Stein Hall's trained salesmen.

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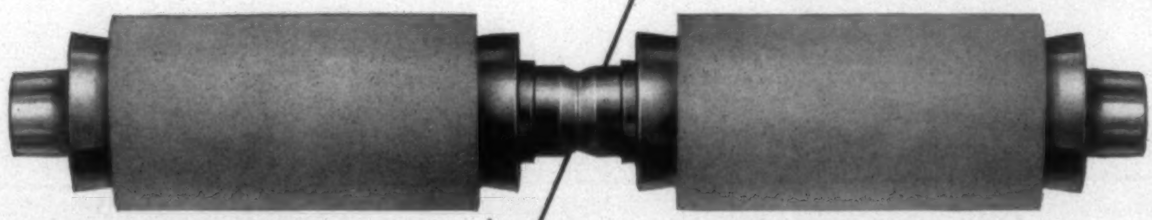
S-L-T NEEDLE BEARING TOP ROLLS

are saving time
formerly required for
ROLL PICKING...
up to 40% and 50%!



These figures are reported by mills *
that are noted for their efficient, capable management — and the remarkably high quality of their products.

Roll picking is very costly.
S-L-T Top Rolls *eliminate half the time* formerly required, because:

1. The smooth finish of the exposed metallic portions of the roll shed lint *almost automatically;* and
2. Sealed-in lubrication means that there is no surface oil to collect lint or dust.

Your frames are clean, your yarn is clean.

Write for illustrated folder which gives complete data on the many features of S-L-T Top Rolls for roving and spinning. Address our nearest Sales Office.

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TOP ROLLS
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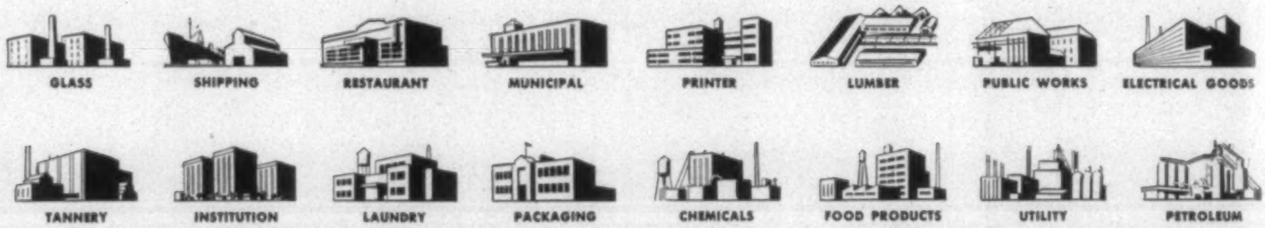
We're all in the steel business!



FOR EACH OF US TO GET MORE STEEL . . . AND PRODUCTS MADE OF STEEL . . . WE'VE GOT TO PROVIDE MORE SCRAP TO MAKE THE STEEL.

Half the melting stock used in the steel mill or iron foundry consists of iron and steel scrap. In normal times, enough scrap is produced by the mills, foundries, railroads, fabricators and scrap dealers to fill the need.

But now the mills have stepped up capacity to meet the greatly increased military and civilian demands for steel. And that increased capacity has outstepped the supply of scrap.

That is why we are calling on plants in both metal-working and NON-METAL-WORKING industries to provide the needed scrap NOW.

You have the heavy scrap needed to make more steel

Enough obsolete machinery, equipment and parts are being carried as useless inventory to give a big push to the production of steel. Surveys have proved this.

The trick is to get that old steel into the hands of the steel producers.

We're putting that job up to you.

To help maintain steel production... provide more steel for the equipment you want . . . turn in your idle iron and steel to your local scrap dealer.

What you can do to help maintain steel production

1. Appoint one top official in your plant to take full responsibility for surveying the plant and getting out the scrap.

2. Consult with your local Scrap Mobilization Committee about its program to help out in the scrap crisis. For chairman's name, check with your Chamber of Commerce, or the nearest office of the National Production Authority, Department of Commerce.

3. Call in your local scrap dealer to help you work out a practical scrapping program. Non-ferrous scrap is needed, too.

4. Write for free booklet, "Top Management: Your Program For Emergency Scrap Recovery", addressing Advertising Council, 25 W. 45 St., New York 19, N. Y.

This advertisement is a contribution, in the national interest, by

textile bulletin

A PUBLIC SERVICE PROJECT
THE ADVERTISING COUNCIL

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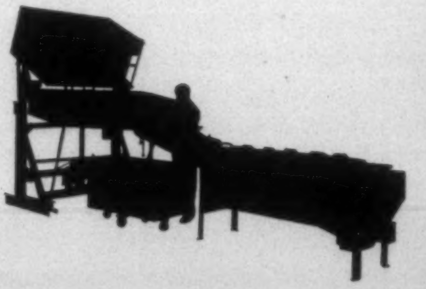
Saving Money

WITH TERRELL'S MODERN TYPE L BOBBIN CLEANER



He is

- SAVING LABOR COSTS
- ELIMINATING BOBBIN DAMAGE
- REDUCING SECONDS IN CLOTH
- CUTTING MAINTENANCE COSTS
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Terrell's versatile Type L Quill cleaner has introduced important savings in removing wool, worsted, spun rayon, continuous filament, and most cotton waste from automatic loom bobbins.

To assure greatest savings, call on Terrell quill-cleaning specialists for an appraisal of your bobbin cleaning and handling problems.

THE TERRELL MACHINE COMPANY, INC.
CHARLOTTE, NORTH CAROLINA

NO SPLATTER CREEP DRIP...

...when you use TEXACO STAZON

Texaco Stazon does just what the name implies — *stays on* the bearing surfaces, *stays off* the goods. *Texaco Stazon* will not splatter or drip despite shocks and vibration of weaving. In spinning, use *Texaco Stazon* in top rolls, saddles, roll stands, or shell roll mandrels. It will not creep onto cots. *Texaco Stazon* is your best assurance of cleaner sliver and yarn, and lower maintenance costs.

Texaco Stazon is easily applied . . . is unaffected by humidity . . . will not form gummy deposits. *Texaco Stazon* lasts longer, requires fewer applications. No wonder operators everywhere praise it so highly.

Texaco has two other outstanding products to increase efficiency and economy: *Texaco Spindura Oil,* used on spindles, assures greater production of cleaner, smoother yarn. *Texaco Texspray* for fibre conditioning assures stronger, more uniform yarn. It reduces static, makes stripping easier and improves working conditions.

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The Texas Company, 135 East 42nd Street, New York 17, New York.

TEXACO Lubricants
FOR THE TEXTILE INDUSTRY

Faithfully yours
50
for Fifty Years

textile bulletin

VOL. 78 JULY, 1952 NO. 7

The S. T. A. Convention of 1952

IF LARGE attendance is at all indicative of a successful meeting, the 1952 annual convention of the Southern Textile Association, held June 12-13-14 at the Ocean Forest Hotel in Myrtle Beach, S. C., was a success. Official registration totaled 442, and more than 100 of these mill supervisors and machinery and supply firm representatives brought along their wives. The following will serve as officials of the S.T.A. during 1952-53:

President: D. A. Purcell, superintendent of the blanket plant of Fieldcrest Mills, Inc., Draper, N. C. (vice-president of the S.T.A., 1951-52).

First Vice-President: T. I. Stafford, production manager for Clifton (S. C.) Mfg. Co. (chairman of the S.T.A. board of governors in 1951-52).

Second Vice-President: J. L. James, manager of Mill No. 3, Erwin Mills, Inc., Cooleemee, N. C. (previously a member of the board).

Chairman of the Board of Governors: J. L. Delany, superintendent of Joanna (S. C.) Cotton Mills Co. (immediate past president of the S.T.A.)

Secretary-Treasurer: James T. McAden, Jr., editorial director of TEXTILE BULLETIN, Charlotte, N. C.

Members, Board of Governors: J. B. Powell (re-elected), superintendent of Monarch Mills, Lockhart, S. C.; J. P. Hughes, superintendent of the Eno Plant, Cone Mills Corp., Hillsboro, N. C.; Howard Barton, superintendent of the rayon plant of Fieldcrest Mills at Spray, N. C.; William M. Pittendreigh, cotton mill superintendent for Riegel Textile Corp. at Ware Shoals, S. C.; and A. M. Moore, superintendent of the No. 6 Mill, Erwin Mills, Durham, N. C. The three-year terms of Messrs. Powell, Hughes, Barton and Pittendreigh expire in 1955, while that of Mr. Moore (who replaces Mr. James on the board) expires next year. The convention saw the completion of terms of service on the board of directors by Arthur S. Jarrett (general superintendent of Highland Park Mfg. Co. at Charlotte), Frank D. Lockman, Jr. (superintendent of the Fort Mill Plant of Springs Cotton Mills, Fort Mill, S. C.), and James B. Lybrand, (assistant superintendent of the Union-Buffalo Mills Division of United Merchants and Manufacturers, Inc., Buffalo, S. C.)

As a result of a motion passed during the convention the office of executive secretary was discontinued, and the office of second vice-president was created. It had been the previous practice of the Southern Textile Association membership to elect each year a chairman of the board, who usually was advanced successively through the positions of vice-president, president and executive secretary. Under the present arrangement the line of succession will be second vice-president, first vice-president, president, and chairman of the board of governors. A. R. Marley (superintendent of Erwin Mills' Mill No. 2 at Erwin, N. C.) during 1951-52 was the last of several ex-presidents of the Southern Textile Association to hold the office of executive secretary.

Continuing to serve on the S.T.A. board of governors are: (for one more year) J. A. Chapman, Jr., of Riverdale Mills at Enoree, S. C.; E. C. Horner of Enterprise Mfg. Co. at Coleridge, N. C., and Walter Vincent of Dan River Mills at Danville, Va.; and (for two years) H. C. Estes of Pacific Mills at Rhodhiss, N. C.; J. C. Godfrey of Calhoun Mills at Calhoun Falls, S. C.; J. R. Meikle of Rosemary Mfg. Co. at Roanoke Rapids, N. C., and T. J. Willis of Greenwood (S. C.) Mills, along with divisional chairmen and past presidents of the organization.

Five addresses (of which texts of all but one may be found on following pages) were featured at the Friday and Saturday morning business sessions. The speakers were Walter Regnery, president of Joanna Cotton Mills ("Comments on the Results of the 17-Mill Test on Ginning Procedures"); W. A. L. Sibley, vice-president and treasurer of Monarch Mills, Union, S. C., and president of the American Cotton Manufacturers Institute (whose subject was "The Missing Element"); R. M. Jones, vice-president of Saco-Lowell Shops at Biddeford, Me. ("The Modernization of Spinning"); Retiring S.T.A. President Delany; and Arthur C. Horrocks, public relations counsel for Goodyear Tire & Rubber Co., Akron, Ohio, ("The Unfinished Dream").

Social aspects of the convention included a buffet supper Thursday evening, a reception sponsored by the S.T.A. Associate Members Division and the annual banquet Friday night, and an unusually good floor show furnished by the Associate Members both evenings. Recreation Friday afternoon consisted of a bingo contest run by Messrs. Delany and McAden, with the assistance of Hunter Hughes of *Textile Industries,* a setback contest run by George Snow of Atlanta Brush Co., and the annual golf tournament managed by W. S. Terrell of Terrell Machine Co., Charlotte.

The Callaway handicap system was used again in the golf tournament, which was played for the first time over the sporty Dunes Golf & Beach Club course. Dee Trammell, superintendent of weaving for Dora Yarn Mill at Cherryville, N. C., led the mill men's division with the low gross score of 79 and was awarded a set of woods. Mr. Trammell, as three-time winner, also retired the handsome Corn Products Sales Co. trophy, which he may now retain permanently, along with his three replicas. A duplicate of the retired cup will be furnished by the donor for the 1953 tournament.

W. A. Rhinehardt, superintendent of Golden Belt Mfg.

Co. at Durham, N. C., captured low net honors (94-18) and received a set of irons. Prizes for second low net and second low gross were won, respectively, by Monroe Randall, assistant superintendent of Carlton Yarn Mills at Cherryville (86-13) and Henry Buchanan, superintendent of Erlanger Mills at Lexington, N. C. (83). Ray Marley managed to consume the greatest number of strokes (133) in touring the difficult layout, and received a supply of golf socks for ranging the roughs in future tournaments.

Among associate member players, Arlo Martin of Iredell Chemical Co., Newton, N. C., wound up with the low gross score of 76 and received a set of woods. A pair of golf shoes was awarded to W. P. Anderson of McLeod Leather and Belting Co., Greensboro, N. C., for low net score (96-20) in this division. Second low gross and second low net were scored by Charles Kelley (77) of Borne Scrymser Co., Charlotte, and E. T. Hughes (77-6) of Gulf Oil Corp., Columbia, S. C. Runner-up prizes in each division were golf umbrellas and boxes of golf balls. Nobles L. Killebrew of Borne Scrymser, Charlotte, had a rough afternoon and his grand total of 142 was sufficient to win the high score prize for salesmen.

* * *

In the election of officers of the S.T.A. Associate Members Division, J. Alden Simpson of Corn Products Sales Co., Greenville, S. C., was elevated to the chairmanship succeeding Vasser Woolley of Seydel-Woolley Co., Atlanta. John Foard of Ragan Ring Co., Newton, N. C., was made vice-chairman, and Junius Smith of TEXTILE BULLETIN was re-elected secretary. The following were named to serve two years on the council of the Associate Members Division: Vernon Ashley of Armstrong Cork Co., Greenville; W. N. Dulaney of A. E. Staley Mfg. Co., Atlanta; Haines Gregg of A. B. Carter, Gastonia, N. C.; J. W. Hubbard of Saco-Lowell Shops, Charlotte; and Robert Walker of Sykes, Inc., Greenville. Carry-over members of the council are J. E. Spivey of the Textile Shops, Spartanburg, S. C.; Richard W. Dunn of Whitin Machine Works, Spartanburg; W. W. Watt, Jr., of Abington Textile Machinery Co., Charlotte; W. L. Morgan of Dayton Rubber Co., Greenville; and Frank Swords of Veeder-Root, Inc., Greenville.

* * *

Tom Stafford, who was to have been in charge of the bingo contest and who had done a commendable job in selecting the prizes, was unable to attend the convention because of a sudden illness.

* * *

Retiring President Delany was applauded vigorously at the conclusion of his appropriate address Saturday morning. After Joe Delany turned over the S.T.A. gavel to Dave Purcell, the new president in turn presented the Past President's medal to Mr. Delany.

* * *

Plans are now being made for the annual conventions of the Southern Textile Association in 1953 and 1954. Next year's meeting will be held June 18, 19 and 20 at Mayview Manor, Blowing Rock, N. C., and tentative plans have been made to return to Myrtle Beach June 10-12, 1954. The usual priority system on room reservations, with adaptations, will be observed. Members of the S.T.A. board will meet this August 9 in Charlotte to make plans for the 1953 convention and for Fall divisional meetings.

* * *

The following firms were contributors to the Associate Members Division entertainment and prize fund: Abbott Machine Co., Abington Textile Machinery Co., Aldrich

Officers, members of the board of directors and past presidents of the Southern Textile Association. ***Front row, left to right:*** **Smith Crow, James A. Chapman, Jr., T. C. Pegram, Walter Vincent, D. A. Purcell, J. B. Powell, W. M. Pittendreigh and J. L. Delany.** ***Back row:*** **John M. Caughman, J. P. Hughes, J. L. James, E. C. Horner, H. C. Estes and J. R. Meikle.**

Machine Works, Allen Beam Co., American Paper Tube Co., The American Pulley Co., American Viscose Corp., *America's Textile Reporter,* Anheuser-Busch, Inc., Armstrong Cork Co., Arnold, Hoffman & Co., Ashworth Bros., Inc., Atkinson, Haserick & Co., Atlanta Belting Co., Bahan Textile Machinery Co., Barber-Colman Co., The Barkley Machine Works, Becco Sales Corp., Blackman-Uhler Co., Inc., Borne Scrymser Co., Bowen-Hunter Bobbin Co., Bryant Electric Repair Co., The Bullard Clark Co., Carolina Loom Reed Co., Carolina Supply Co., A. B. Carter, Inc., Charlotte Leather Belting Co., Clinton Foods, Inc., Cocker Machine & Foundry Co., R. D. Cole Mfg. Co., Corn Products Refining Co., Crompton & Knowles Loom Works, Curtis & Marble Machine Co., D & S Engineering Co., Dayton Rubber Co., Dillard Paper Co., Drake Corp., Draper Corp., Duke Power Co., E. I. du Pont de Nemours & Co. (finishes and dyestuffs divisions), Emmons Loom Harness Co., Fields Mfg. Co., Foster Machine Co., Foxboro Co., Gastonia Textile Sheet Metal Works, Gates Rubber Co., Greensboro Loom Reed Co., Greenville Loom Reed Co., Greenville Textile Supply Co., Grinnell Co., Gulf Oil Corp., Hart Products Corp., Hollister-Moreland Co., E. F. Houghton & Co., Howard Bros. Mfg. Co., Huntington & Guerry, Inc., Hunt Loom & Machine Works, Industrial Supply Co., Keever Starch Co., Oliver D. Landis, Inc., H. F. Livermore Corp., Ralph E. Loper Co., Meadows Mfg. Co., Moreland Chemical Co., National Ring Traveler Co., New York & New Jersey Lubricant Co., Frank G. North Co., Odell Mill Supply Co., Olney Paint Co., Penick & Ford, Ltd., Inc., Pneumafil Corp., Ragan Ring Co., J. E. Rhoads & Sons, Robert & Co. Associates, Saco-Lowell Shops, Seydel-Woolley & Co., Shell Oil Co., The Sherwin-Williams Co., J. E. Sirrine Co., Schachner Leather & Belting Co., Sonoco Products Co., Southern Belting Co., Sinclair Refining Co., A. E. Staley Mfg. Co., Standard Mill Supply, Inc., Steel Heddle Mfg. Co., Stein, Hall & Co., Sykes, Inc., Taylor Instrument Companies, The Terrell Machine Co., Inc., The Texas Co., Texize Chemicals, Inc., TEXTILE BULLETIN, *Textile Industries,* Textile Mill Supply Co., The Textile Shops, *Textile World,* Tide Water Associated Oil Co., U S Bobbin & Shuttle Co., U. S. Ring Traveler Co., U. S. Rubber Co., Universal Winding Co., Veeder-Root, Inc., Victor Ring Traveler Co., WAK Industries, Inc., Watson & Desmond, Westinghouse Electric Co., West Point Foundry & Machine Co., Whitin Machine Works, Whitinsville Spinning Ring Co., Wilkin & Matthews, Wrenn Bros. and Yale & Towne Mfg. Co.

These men *(left to right)* completed terms on the S.T.A. board of governors; F. D. Lockman, Jr., James B. Lybrand and Arthur S. Jarrett.

W. A. L. Sibley

AS I ENTER into the first months of my new duties as president of the American Cotton Manufacturers Institute, I am keenly aware of the responsibilities which are attached to this office. As most of you know, A.C.M.I. is the over-all trade association for the American textile industry. I have found that the expression "trade association" is often confusing to those not directly connected with this work, and I would like to give you a brief word of explanation.

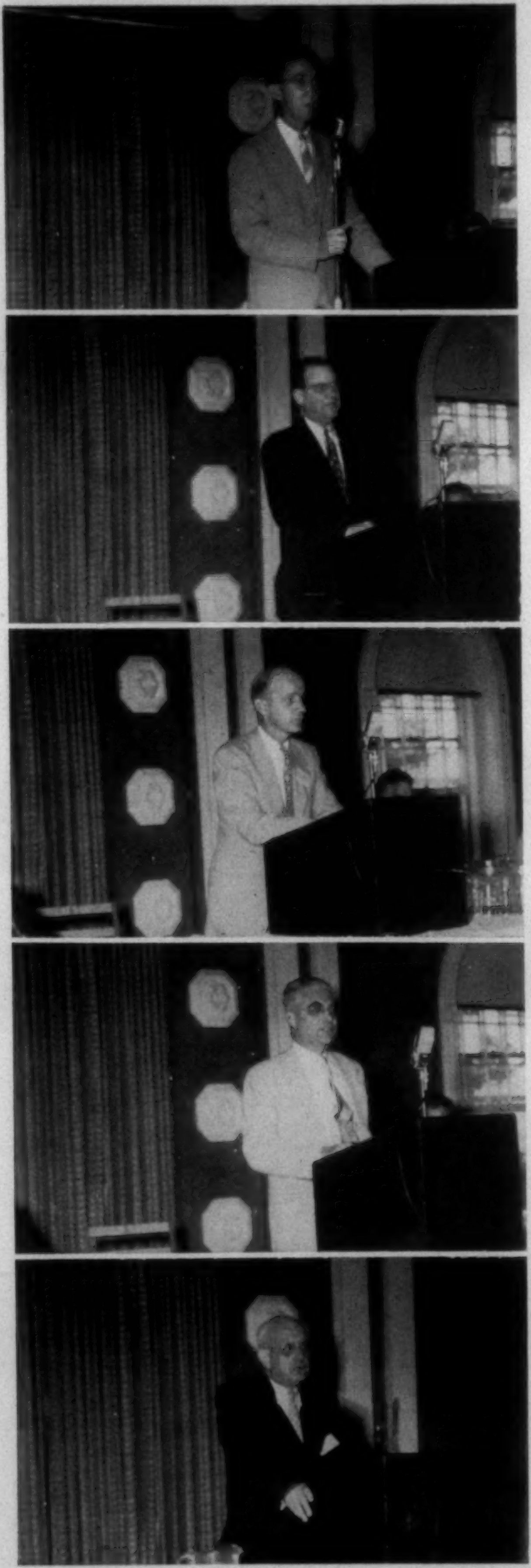
There are many trade associations in the country today. There are associations which represent the meat industry, the steel industry, the railroads and many other types of business and industrial activity. We, of course, are primarily concerned with the association which represents the textile industry. What, then, do all of these associations do for the interests which they represent?

First of all, a trade association is a sort of Chamber of Commerce on the industrial level. An alert and aggressive association promotes the interests of both management and employee, and works in many different spheres to further the progress of the particular industry involved.

You may well ask how this sort of activity is applied specifically to our industry. The A.C.M.I. has four offices—the home office is in Charlotte, with additional installations in Washington, D. C., New York City, and Clemson, S. C. Through its staff and its regularly appointed committees, the institute presents testimony before committees of Congress and before Government bureaus on all legislative proposals and administrative actions which would directly affect our industry. Most of this work is done through the Washington office. The importance of this work cannot be overemphasized. There are literally dozens of measures each year which, if passed, would wreak havoc upon our mills, as well as the welfare of our employees in the mills. Our trade association is both our shield and our lance in these matters.

The institute operates a statistical service, through which

***Left to right:* James T. McAden, Jr., secretary-treasurer of the Southern Textile Association; Howard Barton, newly-elected member of the board; A. M. Moore, new board member; T. I. Stafford, first vice-president; and A. R. Marley (who completed a year as executive secretary.**



mill management is able to follow production, sales and inventory trends for seventeen different types of cotton production. Summaries of these statistics are made available to participating mills, and all members receive a quarterly compilation of statistical facts called *Cotton Textile Hi-Lights*.

Another important activity is the dissemination of information regarding Wage Stabilization Board regulations, price control regulations and other questions of similar importance. It is the duty and the responsibility of the institute to keep the industry informed on numerous subjects, and this is done through frequent bulletins from the Charlotte office.

Through the Clemson and New York offices still other important activities are administered. At Clemson, A.C.M.I. operates a fiber-testing laboratory and a training school for technicians. In New York it maintains liaison with the Worth Street selling houses and supervises the operation of an arbitration board, where the buyer and seller of yarn and cloth may bring their disputes, thus saving expensive court costs.

With another trade association, the American Cotton Shippers Association, the institute also operates an arbitration board in Atlanta. This is called the Cotton States Arbitration Board, and through its machinery, disputes involving raw cotton may be settled without the necessity for referring to the courts.

In many respects, trade association work is a very broadening experience. Certainly, I have found it to be so. It gives each of us an opportunity to view the happenings beyond the confines of our own mills and to see them in broad perspective from the standpoint of our industry and of our nation. It is about that broader picture that I wish to talk to you today.

As each of us looks at the world about us, we find ourselves deeply concerned with what we see. Each morning's newspaper brings stories of wars and threats of wars, of dishonesty, and the decay of public morality. We might well ask ourselves: "What has caused all of this, and what can we do to correct it?" I am not here to give you the solution to these problems. I earnestly wish I could. But I believe we (you and I) can help solve them if we will consider what I call "The Missing Element."

Look for a moment at the situation which developed concerning the recent dispute in the steel industry. Our country was founded on the principle that we, the people, control the government. That philosophy was reversed the night President Truman made his famous, or infamous, radio address and when he seized the steel mills. We shall be forever indebted to District Judge David A. Pine for drawing the reins tight and rendering his historic decision, and to the U. S. Supreme Court for upholding his decision. "The Government of the United States" said Judge Pine "was created by the ratification of the Constitution. It derives its authority from the powers granted to it by the Constitution. . . ."

We saw these principles ignored in May. If the President can seize the steel industry, why can't he also seize the corner grocery store and the homes and families of our neighbors? Indeed, under the philosophy expounded by an assistant attorney general, who represented the govern-

S.T.A. convention speakers were *(top to bottom)* Joe Delany, W. A. L. Sibley, Walter Regnery, R. M. Jones and Arthur C. Horrocks.

ment in Judge Pine's court, the President could seize all these things, and could also seize you and me. By a vote of six to three, the Supreme Court stopped Mr. Truman, but the disturbing part of this decision is the narrowness of this margin. Whenever fundamental principles of democracy are ignored, we travel an oblique path from the Constitution and from the Bill of Rights. Primary democratic principles were ignored in England in a somewhat different manner, and there it was called Socialism.

We have also seen our government fail us in another way. Most of us had considerable faith in federal tax collecting agencies. We knew, at least, that they were always alert to take a good percentage of whatever we could earn; thus, it was with considerable amazement that we read the story which began to unfold some months ago and which is still unfolding. We found that many thousands who were charged with the enforcement of the tax laws were reaping a whirlwind of greed and dishonesty, and that there seemed little inclination on the part of their superiors to prosecute them for their wrongdoing. Thus does dishonesty in high places seep through the body politic to the individual citizen, with the danger of it enveloping you and me.

There is little wonder that as we view the events around us we are concerned for the type of world in which our children will grow into men and women. I am not going to attempt to tell you in detail how we came to find ourselves in this situation. I can, however, give you a few thoughts on the subject, and the predominant thought is the one upon which the title for this address was based—"The Missing Element."

You and I are in the mill business, and we know that if we are given sufficient time we can teach a man to perform, with reasonable efficiency, all of the duties in our plants. We can teach carding, spinning and weaving. We can train men to become loom fixers, and we can even train men to supervise the work of others and to deal with their subordinates with intelligence and human understanding. In fact, there is perhaps only one thing we cannot give to a man. We cannot give him integrity—that moral wholeness that comes from above and grows within the man. This, to my way of thinking, is where our country has gone astray. This is "the missing element."

Each of you here is in a position of managerial responsibility. If I could leave with you one thought it would be that on your shoulders rests a very heavy responsibility. Someone has called it "the weight of command." You and I cannot develop character and integrity in our subordinates unless we, ourselves, are men of character and integrity. You see, the whole process starts with ourselves. Each of us in a supervisory or executive position has authority over who is hired in our department or plant. A friend of mine once pointed out the fact that we tend to draw around us people of our type—people of our temperament—of our likes and dislikes—people with whom we are congenial—whose moral character is similar to our own. Consequently, if we choose the right type, they in turn will draw around them people who think and act as we do, and in this way we make our plant and industry strong. If each of us does our part in making our industry strong, we shall then be helping to bring our nation back to the principles upon which our forefathers built it.

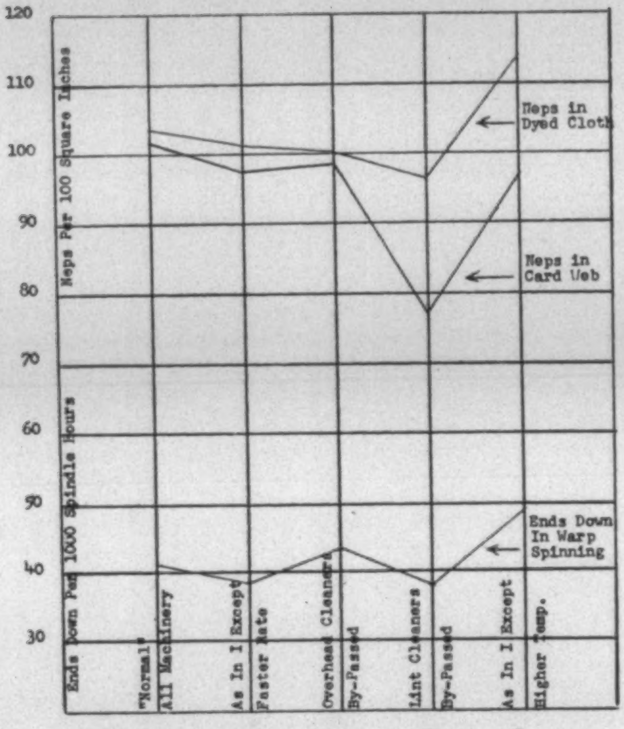
We must not starve our souls. A spiritually nurtured soul is our balance wheel of life. It prevents our life from becoming eccentric. We may have brilliant minds, be physical specimens of health, and be endowed with winsome personalities, but if our soul is dwarfed, our life is out of balance. We become as a great engine without a governor, not only preventing the power of the engine from useful work but rather in the end destroying itself.

Finally, I want to stress the greatness of this textile industry of which you and I are a part. Made up as it is of several thousands of corporations, with many centers of initiative, great research undertakings, many selling and distributive organizations, giving employment to 1,217,000 people, with an annual payroll in 1950 amounting to $3,578,000,000, our textile mill products industry ranks fifth from the standpoint of providing jobs to employees of this great nation of ours, being led only by (1) machinery, (2) transportation equipment, (3) food and kindred products, (4) primary metal industries, in that order. I am sure you are aware of the fact that during World War II our products ranked in importance in the war effort second only to steel. From this, I am trying to show that if we build integrity and strength of character into the leaders of our great industry, our industry in turn will have its impact for good on our nation's total economy. Now, the reason I am making this statement to you today is because it is out of this group mainly that the leaders of this industry will come for tomorrow. Practical men, men who have the manufacturing "know-how," are being chosen more and more to be the executives and leaders of this industry. I can remember when I began work in a mill some 29 years ago that the top executives were bankers, or merchants. Good business men, of course, but men not technically trained. This is not so today. More and more, the top executives are men who have worked through the plant and know the practical side of manufacturing. So my plea to you men today is that you plow deep, that you don't neglect the spiritual stature, but that you feed the inner man so that when you become the leaders of this great industry, you will bring to it such strength that it will be known as the Golden Age of Textiles, and you will hand down to succeeding generations a heritage that is priceless and enduring. This, men, is what the nation and the world is hungering for. Thus you will supply that "Missing Element" that our nation so greatly needs.

Walter Regnery

VERY important to the textile industry is the report recently published by the National Cotton Council giving the results from actual mill tests of spinning and weaving of cotton ginned under five different conditions in order to ascertain what ginning procedures are preferable. I urge all of you to get the full report. Here are some observations which show the importance of this report to the industry.

Why the Test was run—"Mechanization of the cotton industry has been accelerated, due in part to a shortage of labor. These rapid changes have increased the problem of gin machinery manufacturers and the cotton mills, as well



Average results from the 17 mills vs. the five gin procedures.

as those of the farmer. Mechanical harvesting is one of the most important time and labor-saving developments in the cotton industry, and yet, from its use, a number of serious difficulties, both to the ginners and spinners, have arisen. Mechanically harvested and snappped cotton contains a much greater proportion of leaf and stem fragments than handpicked cotton from the same fields, and is correspondingly harder to clean. Ginners are, therefore, confronted with the problem of removing the excess trash without damaging the fibers. Moisture is added to the cotton picked by spindle type pickers and shortage of labor frequently results in a poor quality of handpicking. To meet this need, new types of cleaners and new ginning techniques have been developed.

"Cotton gins were, until mechanical harvesting was introduced, simple plants. Dryers were added to facilitate cleaning, and additional cleaning equipment was added to improve ginning performance. More recently, lint cleaners were added to extract trash from the ginned lint.

"Many spinners have claimed that while the grade is improved by these new ginning practices, the cotton is damaged to the extent that spinning performance and quality of the finished products are adversely affected. Independent mill tests have indicated that the quality, or spinning value, of the cotton is affected in ways that are not easily detected by the usual cotton classing techniques. In certain of these mill tests, sampling and ginning procedures were not sufficiently controlled to isolate the causes of the damage.

"A study was undertaken, therefore, to investigate on a commercial scale the effects of the use of certain ginning machines and variations in ginning operations on the spinnability of the cotton and the quality of the finished product. Representatives of each branch of the cotton industry, with the co-operation of interested governmental agencies and gin machinery manufacturers, set up this experiment to supplement the previous tests by commercial mills and the U.S.D.A. The National Cotton Council acted as a liaison for the entire group and with the aid of the American Cotton Manufacturers Institute, Inc., served as a clearing house for assembling the data. The report was written with the aid of the Technical Sub-Committee."

Procedure of Test—"This report presents the results obtained from a large scale investigation of the effects of various mechanical operations and practices in cotton gins upon the spinning characteristics of the fiber and upon the quality of the finished fabric. The tests were carried out under commercial production methods in six gins, two each of three makes, and in 17 mills in which a great variety of equipment was used. The ginning tests were carried out in two main areas of the Cotton Belt, and in each area three pickings were made, one being hand-picked and the other two harvested by spindle type pickers, for each of the three makes of gins. Enough blended seed cotton was secured at each gin to produce 25 bales of lint cotton. At each gin five test runs of five bales each were made in accordance with the following schedule: (1) Without modification of the usual practice, so-called "Normal" ginning. (2) As in (1) except at a faster rate. (3) As in (1) except the overhead cleaners were by-passed. (4) As in (1) except the lint cleaners were by-passed. (5) As in (1) except at a higher temperature."

The control of this test at the gins as to the five procedures was not too good. In an effort to get the cotton processed under everyday gin condition, Test 1 was run at the same rate and temperature that the gin was set at the time of the arrival of the test cotton. It was found that for Test 2, which was supposed to be twice normal speed, that the gin was already running such a high production only a slight increase in speed was possible. Also, the heat for "normal ginning" was already so high that for Test 5 not much heat could be added or the gin would be burned up. Test 3 was not too good as the amount of overhead cleaning that could be by-passed varied from gin to gin. However, in Test 4 the lint cleaners were by-passed in every instance. In addition to these facts no attempt was made to measure such parts of the gin procedures as rate of feed, temperature, or waste produced.

In contrast to the ginning procedure, I feel confident that it is fair to say that the 17 mills in their part of the test did an outstanding job in following, reporting, and sampling of the various cotton through their machinery. The credit for this goes first to the mills themselves for being so co-operative and to John Wigington of the A.C.M.I. who laid out the test procedure in such practical as well as complete detail. The 17 mills reported everything from speeds, types of equipment, settings of each procedure to waste percentage of all steps. Samples of each process were taken including waste.

With the limitations of the ginning procedures in mind, let us look at the graph showing the average results of all 17 mills as the five gin procedures.

This graph, I believe, shows the significant results of this test. To a print cloth mill, neps are one of the most important quality factors in their finished cloth. It is a factor that many times is responsible for cotton cloth losing its place in the market to synthetic fibers. Any improvement here, then, to any segment of the over-all cotton producing or manufacturing organizations should definitely help either to hold the present market or increase the consumption of cotton. You will note on the graph two plots of nep results from these tests, one showing neps in dyed cloth, the other, neps in the mill card web, all of which results were counted by one man at the U.S.D.A. Laboratory.

Test 4, where the lint cleaners were by-passed or where the cotton received the least amount of matching at the gin, gave a marked reduction in neps at the mill. In the case of the neps in card web, the count was reduced from 102 for normal to 76 in Test 4, a reduction of 25.5 per cent or from 96 in Test 5 with excessive drying to 76, a reduction of 20.8 per cent. The neps in the finished cloth were reduced to 96 in Test 4 from 105 in Test 1 (or 8.6 per cent) and from 115 in Test 5 to 96 (or 16.5 per cent). In other words, the tests show that a reduction in neps of 25.5 per cent in the card web or 16.5 per cent in the finished cloth can be made at the mill level by gin procedure.

The reduction of 25 per cent in the card nep count is very important to all concerned in our industry. This improvement would be most difficult to get in any other way. For the mill to get this reduction, they would have to card at a slower rate. The average carding rate for the 17 mills was 9.5 pounds per hour. To reduce the nep count 25 per cent, I would estimate, from tests that have been run in carding rate vs neps, that this would have to be reduced to seven pounds per hour. In the case of a 100,000-spindle print mill this would mean the addition of 80 cards, with an investment cost of $320,000. These extra cards would cost the mill about $25,000 in additional direct labor cost per year to operate. In other words, the ginners should use great caution in either overdrying or overmachining the cotton, as it well might add so much to mill costs or add so many neps to the finished product that cotton will be replaced by synthetic fabrics.

The graph on ends down on spinning shows the same results as that of neps. These figures, too, are very significant to the spinner and therefore should be well noted by the ginner. Thirty-eight ends down, as shown for Test 4, is about the maximum the spinner can have and still maintain his operative work load. Any higher than this would require a smaller work assignment or a lowering of the spinning production to bring the ends down back to standard. Either of these changes would result in higher manufacturing costs, making cotton less competitive with other fibers. Forty-nine ends down, as was the average for Test 5, would require the change to be made.

THE JACOBS MOBILE BAR served refreshments to members attending the Southern Textile Association meeting at Myrtle Beach, S. C.—on the golf course during the tournament and to bathers on the beach in front of their Ocean Forest Hotel headquarters. In the picture, *left to right*, are Service Engineers Frank Beaver of Concord, N. C., L. L. Froneberger of Greensboro, N. C., Sales Manager W. R. Muller of Danielson, Conn., and Service Engineer Lonnie McCall of Greenville, S. C. Not present when the picture was taken was Ben Henderson of Greer, S. C., another service engineer.

The test also showed that overdrying and maximum machining at the gin resulted in lower yarn strength, as well as lower cloth strength. The amount of this difference was small, but the results were all consistent from mill to mill. The strongest yarn and cloth were made from Test 4 cotton.

The average grade from Test 4 came out 92.1, or SLM—, whereas, the grade from Test 5 was 95.4, or SLM+. On today's market, Test 4 cotton would have a value of 38.80 cents and Test 5 a value of 43 cents per pound. The waste at the mill for Tests 4 and 5 ran 11.53 per cent and 10.20 per cent, respectively. From these figures we can calculate the cotton cost on 100 pounds of finished cloth as follows:

TEST 4

Cotton	111.5 lbs. at 38.80	(2)	$43.26
Waste salvage	11.5 lbs. at .20		2.30
Net cotton cost 100 lbs. of cloth			$40.96

TEST 5

110.2 lbs. at 43.00	(2)	$47.39
10.2 lbs. at .20		2.04
Net cotton cost of 100 lbs. of cloth		$45.35

From these figures we see that it would cost the mill 4.39 cents per pound less to produce cloth from Test 4 than from Test 5. This cloth would be stronger and would have 16.5 per cent fewer neps. The lowest grade cotton gave the best and cheapest cloth.

It is most interesting to note that for a given cotton there was no difference in the measurable fiber properties from each of the five ginning tests. The cottons were tested for fiber length—upper half mean, mean, and uniformity ratio, fineness, and strength. None of these fiber properties varied as to gin procedure. We have already seen that under actual mill conditions they acted quite differently; practically—to the tune of 4.4 cents per pound of cloth for the raw cotton plus at least one more cent per pound in manufacturing cost. This points up two facts: one we need some test procedure to indicate why Test 4 cotton is different from Test 5 cotton; also, the grade and staple method of buying cotton may not indicate the true value to the mill for the product. The cotton buyer can't spot Test 5 cotton. If much cotton is handled this way in the gin it is bound to go on to the mill. The mill will have plenty of trouble making this cotton into a finished product, particularly on those days when he gets a lot of this in his daily blend.

The ginner has been adding machinery to his equipment in order to produce cleaner cotton that will come out with a better grade. The cotton farmer takes his seed cotton to the gin that he feels will give him the best sample of ginned lint. We have seen from this extensive test by actual mill runs that blindly following this procedure might hurt everyone. The farmer and ginner might well lose the market to synthetic fibers. The mill will get a poorer raw material which will either turn out an inferior product or one that has a higher unit cost.

This co-operative test, involving all segments of the industry, has clearly demonstrated a dangerous trend in ginning procedure. It proves that the new additional machinery being added to the gins must be operated with great care and skill to prevent real damage to the cotton fiber. The test has clearly defined the problem.

I believe the true co-operative spirit that exists between the farmer, ginner, and spinner can put these facts to good use and make cotton into a better product, better able to compete with synthetic fibers. If these facts are not used, cotton will be in a dangerous position.

Robert M. Jones

TODAY, although cotton is still the most used textile material, the major interest is on synthetics or man-made fibers. With a rich new field as an incentive, the machinery builders instigated a wholesale research program which is just beginning to produce real and permanent beneficial results. The textile machinery manufacturers soon realized that entirely new machinery, founded upon new theories of fiber control, would be required to enable the mills to spin these fibers with any degree of success and satisfaction. Improvements and advanced ideas regarding methods of handling fibers range from small mechanical changes through applications of new assemblies to existing equipment, to entirely new concepts of processing. The superior merits of many of these changes have been of benefit to the cotton and worsted spinning industries, as well as to the users of synthetic fibers. In fact, some of the most radical changes were originally intended for the synthetic spinners but have eventually had a greater effect on the modern methods of processing the natural fibers. The additional knowledge which has been gained inevitably brought forth methods and machines offering greater possibilities of achieving the goals of increased production, more perfect fiber control, and reduced preparatory processes.

While long draft and shortened processes have been common practice in the spinning of cotton for over 20 years, there was little interest among the worsted mills in improved methods and machinery. It is interesting to note that the first long draft patent, Jim Fuller—1868, employing aprons in the United States was for long staples, in this case hemp and flax, and the principle of all long draft spinning is so clearly outlined in the specification of the patent that I quote from it: "For by my apparatus the long fibers can be drawn without breaking, and unimpeded, while the short fibers are held with a gentle and yielding pressure in contact with the longer fibers until they are seized and carried forward by the front drawing rollers."

Z Frame

Essentially, the Saco-Lowell Z frame is based on Fuller's principles; also the present-day modified French system, and in 1949 the English Casablancas S-3 with removable platform. When rayon was first introduced it was cut to a staple length of approximately 1½ inches so that it would run on existing cotton machinery. As the fabric designers gained experience they found coarser deniers would change the hand and appearance of the fabric. However, coarse deniers required longer fibers to make suitable yarns and this required changes in the drafting element to provide the necessary roll spacing, especially when the rayons were mixed with short wools.

The first Z was applied to existing Saco-Lowell Roth spinning frames. The maximum spread was 3¾ inches and provided excellent control for various staples up to three inches long. As the roving enters the nip of the back rolls with their firm grip on the strand, it is passed forward, supported by the apron until it reaches a carrier roll which passes it along to the succeeding carriers. The space between the back roll and the front carrier or control may be called the auxiliary drafting zone, since within its area no positive drafting can take place. The active drafting zone is that space between the front roll nip and the first control roll. It is here that the positive draft, resulting from the high-speed front roll is created. The control roll and, to a lesser degree, the second and sometimes third carrier roll restrain the forward movement of all these fibers which would move forward out of turn as a result of interfiber friction, and at the same time permit those positively held by the front roll to move rapidly forward. When running stock shorter than 2½ inches the back top roll is placed on the middle bottom roll. The middle and back roll can be adjusted as a unit.

The latest model, the Z5, while retaining all of the features that have made the Z system successful, has removed the three-inch staple limitation. This machine produces excellent yarn from 1½-inch staple viscose up to 5½-inch wool, and effectively controls straight runs or blends of natural or man-made fibers in this length range.

FS-4 Roving

As we worked on long staple rayons and mixtures of rayons and short wools, interest was aroused in processing 100 per cent wools. Several mills took up this idea and made yarns and fabrics from short top wools and, for a period, were quite successful. However, there is a limited amount of wool available that would run on this modified cotton machinery. Furthermore, the short wools were expensive and not suitable for many fabrics. Consequently, it was agreed that we would design drafting elements that would handle all lengths of wools, mixtures of wool and synthetic fibers, and even mixtures containing cotton.

Like all Saco-Lowell designs, any new machine must make better yarns, not just as good, at lower costs. Our experience with cotton and man-made fibers was applied to the development of a new process for the worsted industry. The object of the engineers who were assigned the task of developing the Saco-Lowell worsted system was simple even though the problems facing them were not. It was to produce yarns surpassing those produced by the French and Bradford systems at costs which would compare favorably with those of the modified cotton system. The obvious answer to the matter of cost was to reduce the number of operations involved, through the use of long drafts. The problem was to do this and still produce the superior quality yarn which was essential.

The answer to the problem lay in maintaining proper control of the fibers while they were being subjected to the strenuous drafting process. We elected to do this according to the patented principles of Benjamin Shaw, a Saco-Lowell engineer who had had a large part in developing long draft systems for cotton and rayon. Briefly, Shaw's idea was to maintain a yielding grip on the fibers being drafted and to let interfiber friction exercise a substantial part of the control. Many modifications to Shaw's drafting systems were required in applying it to the worsted field, but the basic principles were not changed.

The roving and spinning systems for worsteds developed by Saco-Lowell may be considered together since the principles employed in each are basically the same. Their drafting units contain a single drafting zone and the fiber control is affected by the use of a roll and apron. For convenience we can refer to this roving and spinning drafting unit as the "Type 4" drafting unit, the roving frame employing it being known as the FS-4 and the spinning frame as SS-4. The "Type 4" unit consists of three top rolls and three fluted bottom rolls plus a bar which serves as a guide for the front of an apron which passes over the middle bottom roll. The function of the front pair of rolls and the back pair of rolls is the same as in any drafting unit. The middle section consisting of the middle top roll, the middle bottom roll and the apron and apron bar deserves our attention. The necessity for extending the control closer to the nip of the front roll as the bulk of the fiber strand diminishes affects the means of control and therefore there is some difference in this middle control unit between roving and spinning, although each controls the fibers that slip through it by means of a yielding pressure and inter-fiber friction.

The roving, FS-4, control unit consists of a smooth metallic shell roll co-operating with an apron which passes over and is driven by the middle bottom roll. This middle roll is so constructed that it is of smaller diameter under the center portion of the apron than under the edges. The gap thus created under the center of the apron avoids the formation of a nip through which the stock being drafted would have to pass. The top roll is so positioned in relation to the middle bottom roll and apron bar that its area of contact with the apron begins well forward of the top of the bottom roll. The apron is thus depressed by the top roll between the bottom middle roll and the apron bar. As the fibers leave the area of contact between the apron and top roll, gradually diminishing pressure is applied to them. There is no sudden release of the fibers which might allow them to snap out of position much as a stretched rubber band snaps when one end is released.

SS-4 Spinning

On the spinning, SS-4, control unit there is an additional small diameter self-weighted control roll which is located well forward on the apron and as close as practical to the nip of the front roll. The apron driving roll again employs the gap principle. In addition, the top roll which cooperates with the apron is of metal at the ends but has a resilient center section. As in the case of the roving frame it should be noted that no nip is formed by the middle roll and apron section and that the pressure applied to the fibers being drafted is a yielding one. Because the control roll is used in the spinning version, there is no need for the top middle roll to depress the apron as in the case of the roving frame.

In both roving and spinning the middle control section is located in fixed relationship to the front rolls, without regard to fiber length. Any changes in ratch made necessary by changes in staple length can be affected by simply changing the position of the back pair of rolls. Both frames are built so that they may accommodate fibers up to nine inches in length, yet flexibility is so great that they are able to handle the shortest wools as well.

Pendelwalzen

The problem of successfully drafting long fibers of irregular length in a single zone made necessary new concepts of roll weighting, which in turn created mechanical problems which can be easily appreciated. Plain roll bearings and reasonably accurate top roll alignment were good enough when dealing with pressures necessary to draft cotton. With combined pressures on front and back rolls of up to 200 pounds this was no longer true. These problems have been successfully met by the use of anti-friction roll bearings and the patented self-aligning top roll. The latter is based upon the fact that a pair of top rolls, if allowed to pivot freely from the center of the arbor supporting them, will seek its own alignment when forced against the bottom roll. This center support, incidentally, did away with the necessity for the cap bars which had formerly been standard and often troublesome equipment on spinning and roving frames.

F5 Roving

The most recent roving drafting element for which a patent has been applied has been developed for handling wool and synthetics or various blends containing both. Here we have an arrangement of rolls employing an apron and an apron bar with a middle top roll which depresses the apron, similar to Shaw, and affords control over the fibers during drafting; not at one point, such as we get with slip rolls, but over a length of the fibers. The amount of control is governed by the amount that the middle top roll depresses the apron. The amount of depression, and thus the amount of control, is adjusted by changing the distance between the apron bar and the middle bottom roll. Let me stress also that in addition to this adjustment, it is possible to move this control so that we can run it with its minimum or maximum depression right up close behind the front rolls or way back next to the back rolls. In running nylon, it is usually desirable to use a minimum amount of depression and to keep the control well back on the tail ends of the fibers.

In order to facilitate replacement of aprons, the middle bottom roll is not continuous, but is in short sections which run only from roll stand to roll stand. The actual driving roll is the roll at the bottom which is continuous from one end of the frame to the other and is really more of a shaft than it is a roll. The apron is nipped tightly and driven between the shaft and the middle bottom roll and the middle top roll is held away from a positive grip on the apron by means of the outer race of a ball bearing on each end of the roll.

The roll which goes only from roll stand to roll stand rests directly upon the aprons, gripping them tightly and it is the nip at this point which drives the aprons. The roll itself is gear driven from the long bottom roll or shaft at this point. The top roll runs from roll stand to roll stand also, but there is a positively maintained clearance between it and the aprons as the aprons go over the top of the bottom roll. This clearance is maintained at the end of the rolls by ball bearings. There is a ball bearing on each end of the top roll. The outer races of the ball bearings rest on each other and maintain the clearance at these points which keep us from getting a positive nip of the fibers as they pass through. The top roll itself is in turn driven from the bottom roll at this point. This pair of gears as well as the pair which drives the bottom roll at the other end are molded gears; thus eliminating any necessity of lubrication, and the consequent collection of fibers, dirt and fly, which we always get from the ever-present over-lubrication. The anti-friction bearings on all top and bottom rolls as well as the ball bearings which are used to maintain the clearance between the top and bottom middle rolls in the control zone are sealed and require relubrication only at scouring intervals when the frame will be stripped down anyway.

Spring pressure is applied to the outer races of the ball bearings on the middle top roll, holding it down and clamping the entire control assembly together.

Another important point is that because of the arc of contact of the apron as it wraps around the apron driving roll, and the wrap around the bottom roll as well as the fact that the entire unit is gear driven, there is no necessity for fluting or knurling to guard against apron or roll slippage. This contributes to a much cleaner machine. There are no cap bars on the frame, as the top rolls are supported and weighted in a manner similar to those on the FS-4.

Experience with this F5 roving frame has shown it to be extremely flexible in handling a wide range of synthetic fibers from 1½ inches in length up to over six inches in length, as well as a full range of the wool fibers used in the worsted industry and all types of blends. The diameter of the front bottom roll is $1\frac{15}{16}$ inches and the ratch may be varied from $3\frac{1}{16}$ inches to nine inches.

Duo-Roth

Although our major interest has been the development of machinery for processing long staples, we have constantly worked on methods to improve cotton spinning. Last year we found a way to improve the Saco-Lowell Roth of which there are some eight or nine million spindles in place today. The Roth system with its thin flexible bottom apron running over an apron bar set very close to the bottom front roll, provides an ideal base for a top apron and close settings without any complicated mechanism.

A simple Torrington needle bearing top roll with two top cradles is inserted in the same cap bars that positioned the middle top roll and slip roll. Pressure is maintained on the cradle by a simple spring that clips on the saddle. A condenser may be added to reduce fly.

Experience indicates the draft of this Duo-Roth system can be increased 50 per cent more and the lea strength of the yarn is greater; in some cases 20 per cent stronger. This is available as a changeover or as a drafting system on new frames.

SG-1 Spinning

Great as has been the progress in the modernization of the spinning frame, it is to be noted that most of the emphasis has been on the drafting elements. The problem of designing and manufacturing a suitable drafting element for longer, better drafts of all kinds of fibers has been a world-wide objective for the past 30 years. Comparatively little work has been done on "spinning" although many of the elements have been studied. Variable speed drives, traversing spindle rails and other devices have resulted and are in limited application, but there had been no over-all thought given to the entire concept of spinning until the late Eugene C. Gwaltney started his investigation some seven years ago. Mr. Gwaltney, whom the writer was privileged to work with for eight years, had always been an advocate of large package spinning. Many years ago when manager of a Southern mill, he had Saco-Lowell build him a large package frame for coarse counts. It was Gene's ambition to develop a large package frame for all counts. That dream has come true.

Mechanically, this is an entirely new spinning frame. Every part has been redesigned with every aid that new metallurgy, new processing and manufacturing methods, and the collective ideas of a score of manufacturers can produce. The result presents a startling and pleasing sight.

The front rolls are located at an unusually great height above the ring rail; namely, 27½ inches at the bottom position of the ring rail, which would yield a node or neck-shaped balloon if the occurrence of the node were not suppressed and the balloon converted to a different shape by the movable control rings which engage it at various levels.

The yarn control is truly revolutionary and results in a considerable decrease in the tension on the yarn as compared with conventional spinning. Mort important, this tension is evenly maintained within close limits throughout the building of the bobbin and at all positions of the ring rail. There are many benefits to be derived from this reduced variation. This minimum variation in yarn tension permits the use of the longer traverse which builds bobbins longer than was previously possible on a cotton type spinning frame. Because of the more uniform conditions of tension at all points in building the bobbin, traveler weights may be selected with greater accuracy to suit the yarn size. With such reduction in traveler tension and the very significant decrease in tension variation, it now appears possible to run the travelers on the new frames up to 50 per cent faster and at the same time to extend their useful life substantially.

Also with the decreased as well as more uniform tension of the traveler, larger ring sizes and/or higher spindle speeds may be used successfully. The requirements of each mill should be studied carefully to determine how best to take advantage of the higher permissible traveler speed. One mill may want to use the maximum size ring; another may want to make slight sacrifices in package size in order to take advantage of high spindle speeds. In either case it must be noted that there will be a substantial increase in package size over those employed on the conventional spinning frame.

Because heavy packages are employed, a spindle capable of handling this size package at high speeds must be furnished. As Gene said, if the New Era spindle had not been invented we would have had to invent it for this frame.

Because of the size of the package we have added a brake. Stopping a bobbin of this size by hand results in bad burns. The brake is also of a novel patented construction. The cam surface is made of sintered bronze, thus providing some lubrication and eliminating any need of replacement of the braking surface.

In order to make full use of the new principles which are a modification of the Shaw system, the frame has been equipped with a completely new drafting element. The steel rolls mounted in anti-friction bearings are carried on a die cast roll stand which is pitched 60 degrees and positioned in such a manner that it delivers the yarn directly over the center of the spindle. This is a very important feature as can be readily appreciated by experienced spinners since the twist is more evenly distributed and runs more closely to the nip of the rolls.

The Saco-Lowell-Torrington top rolls are loosely locked to an arm in order to eliminate the conventional cap bars and assure correct alignment. Since all of the bearings contained within the drafting element are self-lubricated, the entire assembly not only requires much less cleaning time, but will make cleaning easier to accomplish since there is no oil to catch and hold lint and dust. Lubrication will be required at intervals of six months or longer. Yarn soilage by oil is also eliminated.

The Pneumafil vacuum scavenger system has proven itself in hundreds of applications in this country. It is standard equipment built into the Gwaltney frame. This system

Southern Textile Association golfers, *left to right, top to bottom:* Sam Bernardo, R. G. Spratt, Jr., and M. T. Rogers of Textile Mill Supply Co., with Hugh Sims of Fairbanks-Morse Co.; W. R. Muller and L. L. Froneberger of Bullard-Clark Co. with W. P. Anderson of McLeod Leather & Belting Co.; W. H. Layton of Industrial Products, A. A. Rhinehardt of Golden Belt Mfg. Co., W. T. O'Steen of A. E. Staley Mfg. Co. and Guy Williams of Foster Machine Co.

Bill Dobson and Jim Isom of Olney Paint Co., E. T. Hughes of Gulf Oil Corp. and Bob McCrary of Carolinian Mills; Arlo Martin of Iredell Chemical Co. and W. K. Sandefur of Du Pont; Bill Pittendreigh of Riegel Textile Corp., G. M. Huguley of Clinton Cotton Mills, Andy Anderson of Penick & Ford and Hays Reynolds of Keever Starch Co.

John Bryant of Bryant Chemical Co., Bill Uhler of Blackman-Uhler, Craig Madison of Reeves Bros. and Stan Halliday of Draper Corp.; A. G. Leonard of Carlton Yarn Mills, with prize winners Dee Trammell of Dora Mills and Mon Randall of Carlton; Ed Holt and Gus McIver of Erwin Mills with Bill Terrell of Terrell Machine Co. and Chuck Conner of Anheuser-Busch.

George Batchelor of Odell Mill Supply Co., L. C. Harmon of Penick & Ford, Roddy Meikle of Rosemary Mfg. Co. and Dave Purcell of Fieldcrest Mills; Wes Smith and Nobles Killebrew of Borne Scrymser Co.; P. S. Leach and Tom Hollingsworth of Consolidated Textile Corp. with Henry Ashworth of Ashworth Bros., Dallas Neese and Charlie Price of Odell Mill Supply.

W. H. Miley, Jr., Ray Marley, Marchant Cottingham and J. K. Bruton of Erwin Mills; Chuck Mayer of Wrenn Bros., Henry Buchanan of Orr Mills and J. R. Henderson of Parks-Cramer; Herman Cone, Jr., of Cone Mills Corp., Clyde Kelly of Textile Specialty Co., Luke Thomason of Saco-Lowell Shops and Clarence Jolly of Cone Mills.

relieves the spinner of considerable work, in addition to effectively taking care of ends down and keeping the waste open, untwisted and more easily reworkable. It tends to reduce the ends down also.

All the above enumerated construction assemblies have been integrated into an entirely new chassis. Aluminum and steel have largely replaced cumbersome cast iron. The spindle and ring rails are made of aluminum extrusions. Engineers from the aluminum companies worked with the machine's designers for over five years during the period in which it was being perfected. Each spinning frame contains more than 1,000 pounds of aluminum and of this total over 500 pounds are aluminum extrusions, while nearly 500 pounds are die castings and the remainder is made up of sheet aluminum.

The largest aluminum members are the two spindle rails, extrusions weighing 525 pounds per frame. These units would have cost more in conventional welded steel construction than in aluminum because the extruded members eliminate the need for machining and straightening. In addition, the extruded rail provides much greater rigidity due to the box section employed. This, in turn, does much to eliminate vibration which is translated directly into faster and smoother operation of the machine.

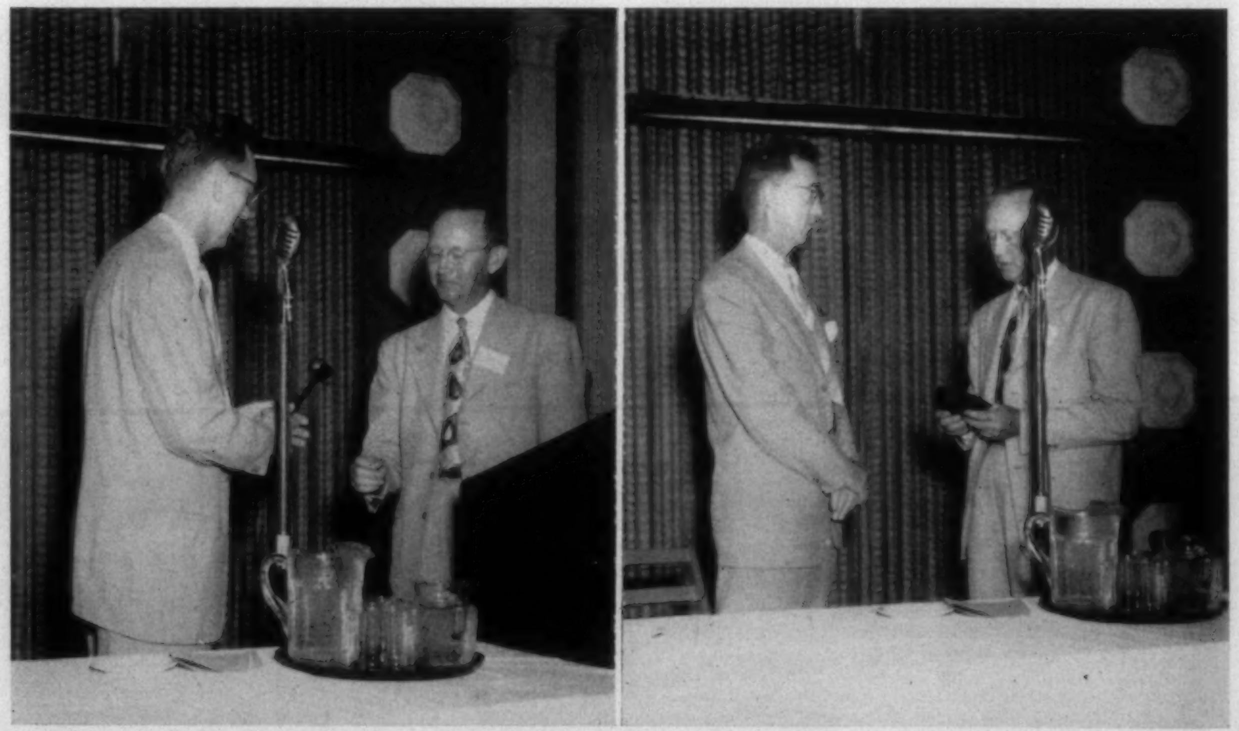
Another important member is the ring rail, also made of extruded aluminum. Lighter weight here has reduced counterbalancing problems, thus permitting smoother reciprocating motion and operation at higher speed.

The significance of the use of aluminum extrusions is that the extrusion process offers the designer an amazing amount of flexibility because it facilitates production of the exact cross section desired by the designer to utilize his metal most efficiently. In this manner, fabricating work is kept to a minimum and the scrap loss becomes negligible. Other interesting extrusions are the two node ring guide bars. These embody an ingenious hinged mechanism that represents a distinct advance over previous designs while eliminating practically all the machining and forming previously required. Aluminum die castings are used for roll stands, various brackets, creel bases and girts, roll slide blocks, eliminating the intricate machining operations required when made of cast iron or steel.

Designers of textile equipment have long looked with favor upon aluminum because of its non-staining characteristics. Aluminum oxide and other aluminum compounds are colorless and so will not stain textile matrials; an important aid in maintaining quality in the textile mill. Most of the aluminum sections are given a green or clear anodic finish to permanently maintain their original attractive appearance.

The head end and head end gearing are entirely different from that of any conventional frame. Although the frame is narrow, the gearing has been compactly placed so that there is adequate space for adjustments. There have been several very practical innovations in making up this head end. As an instance of this, all of the change and constant gears in the head end in the draft gearing are of the same bore and have teeth of the same pitch and width. Any mill man will appreciate this feature as it means that one set of gears can be used as change gears for draft, twist and lay, with the only difference in any gear being the number of teeth. The interchangeability eliminates the necessity of carrying a large stock of gears and further eliminates the confusion and time lost where gear dimensions vary. As a further refinement the gearing is designed so that quick changes in draft gear constants may be made.

The cylinder used on this frame is also entirely new in concept. Two six-inch diameter tubes, about 22 inches long, have flanges welded to each end midway between the bearings. A flange coupling fastens these flanges together and the entire assembly is dynamically balanced at operating speeds. Should a bearing fail (special hi-duty Hyatt's are



***At left*, Retiring President J. L. Delany turns over the Southern Textile Association gavel to 1952-53 President D. A. Purcell, and *at right*, Mr. Purcell makes presentation of the S.T.A. Past President's Medal to Mr. Delany.**

used and this should be very infrequent) the flange coupling can be unscrewed and the section of cylinder removed without disturbing several other sections. This feature will be greatly appreciated by all of you who have struggled and sweated with the removal and replacement of conventional cylinders and bearings.

The frame is driven by a motor located under the frame to provide clear alley near the foot end and reduce floor space. The motor has been specially designed for this frame and all used to date have been water-cooled. The heat generated by the motor is carried off by the coolant, thus reducing to a considerable degree the load on air conditioning equipment as well as the general heat level of the spinning room. In addition, the motor has a type of winding that assures efficiency throughout the doffing cycle. V-belts carry the power from the motor to the cylinder of the frame and permit wide variations in spindle speed with minimum expense. The frame is built in multiples of 24 spindles, each four feet long. At present the maximum length is 240 spindles.

This new frame will not solve all the current production problems but its many features would indicate that it might become a most valuable asset in any textile mill. Again we point out that the savings that may be effected must be determined in the light of each mill's specific requirements. In general, however, the improved running of this frame will enable an operator to handle more sides without increasing his or her work load. The actual number, of course, will depend on the character and size of yarn being spun.

Doffing has been cut drastically, especially on filling where the size of the package has been increased many times over that of a conventional filling bobbin. Under conventional spinning methods for filling, doffing takes place approximately every five hours on 50s yarn. On this new spinning frame running on 50s yarn, a period of up to 60 hours may elapse between doffing.

Its smooth, fast operation makes the new Saco-Lowell Gwaltney frame a marvel of perfection. Lubrication has been cut to once every three to six months for the machine and from four to five years for the spindles. Piecing up has been made easier and quicker. Instead of having to snap up the broken end to the new end emerged from the front rolls, the operator merely holds the end in her fingers, as shown in the picture, and brings it in around the back of the front roll and lets go. This makes the pieced section smaller and less noticeable, and anyone can piece up an end with only a few minutes' training instead of the long period usually required. Furthermore, ends can be pieced up at much higher front roll speeds by this method. Normally, 180 or 200 r.p.m. of a one-inch front roll is the very limit which an end can be pieced. With this new method of piecing behind the front roll instead of in front of it, front roll speeds as high as 250 can be pieced up easily. There is no scavenger roll to remove and clean.

Extremely large packages are produced under economically practical operating conditions. Ends down are low, even in low twist operations. The tension in the spinning thread is low and the variation of tension during the doff is low. Quality of the yarn is high. A single gauge or frame is commercially economical for the entire range of counts, so that a mill installing a frame for use on one count can readily convert to a much finer or coarser count.

I quote from W. Frank Lowell, our vice-president in charge of sales: "The new Saco-Lowell spinning frame will set higher standards of efficiency and production in the textile industry. In developing the new frame over years of careful research, Saco-Lowell's aim has been to place a new and more useful tool in the hands of the industry. What good is achieved will depend to a large extent on how each mill uses this new tool. Here at Saco-Lowell, we prefer to make no extravagant claims as to what our spinning frame can do. We are convinced that wherever it is installed it will demonstrate its superiority over conventional spinning frames, but we prefer to allow our new frame to speak for itself."

Finally, we feel that the foresight, imagination, enthusiasm and seven years' hard work which culminated in this SG-1 frame will stand as a lasting monument to Eugene C. Gwaltney.

J. L. Delany

THERE has always been some talk about how a Southern Textile Association meeting should be run. Most everyone has had an idea about this and I know a lot of them have been tried. Actually, our association is run in a democratic manner and is fully open to suggestions for improvement. Generally, and rightfully so, each divisional group works out the way that suits it best and changes in accordance with the wishes of its members. While most of our membership has to do with spinning and weaving, we are also aware of the large, rapidly-growing synthetic branch of textiles. Recently, a meeting was held in Spartanburg at which nothing but synthetics was discussed. This meeting was well attended and, I'm sure, shed quite a lot of light on a subject that is not too well understood. It was fine to see so many young men in attendance. On them rests our future.

During this past year, it has been my privilege to visit the various sectional meetings. It is an inspiring thing to see so many men meeting together and accomplishing so much good. Most of the fine work done by the Southern Textile Association is done at these meetings. Prior to the meeting, one can see small groups of men earnestly discussing topics of vital concern to them. Of course there may be some seasonal topics too—such as football, hunting, or fishing, and you'll find plenty of textile discussion, I know. Like the filling in a sandwich, such seasonal discussions make the bread of our textile discussions better. Then, the hard-working committeemen get the crowd inside and begin the business of the day.

By discussion we accomplish much. Exchange of ideas may mean the success or failure of a mill or an entire industry. Here's an example given by Professor Jack Bogdan, of North Carolina State, in the 1951 Fall Northern North Carolina-Virginia Division meeting at High Point, N. C. Prof. Bogdan made a splendid talk on his trip to Europe and the mills he visited there. He was speaking on why European mills are below American production standards. They were worried over this, and practically all asked why;

Professor Bogdan then pointed out that they were all very secretive, did not make visits to other mills and would allow no visits from other mill men. He went on to say that he saw nothing in his visit which was a secret or even that he would care to take back with him. The exchange of information, according to Jack Bogdan, is a psychological matter and maybe that is what makes our textile industry what it is, and maybe the lack of it is what keeps the European industry behind and always will. One man does not have all the answers to anything and you can't get everything by reading the trade papers. It takes an exchange of information in meetings like this.

To illustrate still further the value of interchange of ideas, I'd like to give a personal experience. Sometime ago we at Joanna had just completed installation of our Regnery warp spindle adapter and we were certainly pleased with its spinning performance. However, the larger yardage on the warp bobbin required changes in our spooling to more efficiently handle this new, bigger package. We did quite a lot of figuring, bought new sections to lengthen out our spoolers, then sat back to rake in some nice juicy savings. It didn't work out like that right away. We just had trouble on top of trouble, and it kept getting worse. About that time the Southern Textile Association was having its convention here at the Ocean Forest and I came down with our crowd, hoping that the lightning would strike, solve our problem, and all would be well. The lightning didn't strike, but I had the great pleasure of sitting on the cool front porch of this hotel, in a nice deck chair and talking for about three hours with Mr. McElroy, of Barber-Colman, who gave me the benefit of his vast experience in this field. I made copious notes and went back home armed with plenty of ammunition to attack our problem. Thanks to this and diligent work on our behalf, we finally licked our problem and got out of the dumps. I always shall feel that in this instance I received a wealth of good practical advice while seated on a cool, shady, sea-view veranda. It certainly was acquired as painlessly as one could absorb it.

Now for the problem uppermost in the minds of all of us at the present time, the problem on which all of us want help from these meetings, the textile depression now gripping our industry. This is not a new thing, for many here have passed through similar times when the selling price of cloth was murderously low. This crisis, however, is unique in the respect that most of our mills are in top-notch physical condition due to the amazing technological improvements in textile processing machinery made since World War II. The Southern textile industry was quick to accept and install such equipment and we are all very proud of our splendid plants. Now then, since we are all —or nearly all—on the same starting basis as far as plant goes—we have to look elsewhere for our margin of superiority. It can only be gained by the personnel of one's mill. Stated another way, it plainly means that man and not machine is still the dominant factor of success. It means that a group pulling harmoniously together as a team will be hard to beat.

We all want to cut costs, to improve quality, to make money. Sometimes adversity will develop a lot of ideas that will pull our plants in the profit direction. Adversity though, doesn't always work as a good many of us have seen. We must strive to turn it to good use. A man can study, buy books, magazines, and pamphlets, that will give him a certain amount of stimulus. He can take college grade correspondence courses which certainly will develop his mind. He can attend group meetings at which he will meet men in his line of work. This will give him access to thoughts lighting up ideas already dormant in his mind.

My theme for this meeting, then, is how to use our personnel to best advantage, to build up a team of top-notch workers, alert to every opportunity to improve themselves and the way they run their jobs.

Ws ourselves must be enthusiastic and progressive to keep those around us on their toes. Knowing our job thoroughly is only half the battle. We must develop the team spirit, respecting the worth of each individual and expecting the best effort of each individual if we are to succeed in our ambition "The most expert superintendents and overseers in the textile industry."

Gentlemen, that is our motto, and it is a big job to do our part in attaining this goal. The men who formed our association were men who did not have the wealth of technical advantages we possess today. They were practical men who realized that if they would get together and share their ideas, then all would advance faster as a group than as an isolated unit. That is our reason for being here today. That is the purpose of our organization. That is what has kept it in being for almost half a century. And that is what will keep it going so long as our industry shall have need of it.

A Quick Look At The Industry

By JOHN L. BEACON

THE pulse, the real life line, of the spinning and weaving industry today in this country is in the Carolinas, both North and South. A more accurate appraisal and cross sectional survey of the condition of textiles can be gained there than in any other section of the country. Approximately 15,000,000 spindles are located within 250 miles of Charlotte, N. C. Within the boundaries of the two Carolinas are big mills and small mills, new mills and old mills, well managed mills and some which are now faced with liquidation. Today, more than ever before, there is a diversity of types of mills in these states as worsted and synthetic plants have taken their place along with the carded and combed cotton mills which have been there for so long.

At the present time the cry is out that the industry is in one of the worst "recessions" it has ever seen. Demand for yarn and cloth is supposed to be lower than any time since 1932. Mills are said to be closing, liquidating, selling out, getting out from under while there is still something to be saved before the big crash. Before joining in the chorus let's take a good look at the present market situation and see how some of the mills are doing.

There is no doubt that the textile industry is in a slump at the present time. Throughout the Carolinas there are mills—good mills—which are curtailing production in one way or another. This curtailment is taking several different forms, with some mills shutting down for week-long holidays, some dropping a shift, while others are running part-time weeks. Still other mills have decreased their production by operating only part of the total spindleage and weaving capacity. Some mills are closing down while others have been sold or liquidated.

Some of the top executives in the industry, managers and owners of large mills, have given their opinion of the present market status, its causes, and the probable length of time before business in general picks up. Without exception their views are not optimistic, but in no case are they ready to become panic-stricken or to resort to desperate measures to continue to operate. These gentlemen, all of them experts in the field of manufacturing, marketing and financing, feel that the industry is in for a rather long period of hard times and fierce competition. At the same time they are confident of their own ability to weather the storm and to wait out the lean times until the market again becomes strong. As proof of their confidence, many of the mills which they control are either engaged in or planning on the acquisition of new equipment or the modernization of existing machinery. It must be remembered that men of this calibre are generally in their positions of responsibility because they have the judgment and industrial knowledge that is gained by many years of experience in textiles. As such, they have seen other lean times and know that the period can be and must be weathered, in contrast to many of the young men now entering areas of responsibility who have not had the dubious pleasure of living during a period of "no business." These older men know that the textile industry is noted for living in either times of feast or famine. Young men, having matured in a period of feast, do not understand famine nor do they have the experience to face famine coolly and with confidence.

What is coming today calls for a readjustment of standards. During the past years since the start of World War II the industry has enjoyed what is probably the greatest boom in history. As this boom was sustained over a period of years, the industry had time to become equipped to cope with the extraordinary demands imposed upon it. In time what had first been considered the war boom became accepted as normal business. The boom is now over—but the mills are now geared to produce in boom quantities.

Just consider what has taken place in the textile industry since the first days of World War II. During the war the mills were called upon to supply the government with tremendous quantities of all types of fabrics to equip the military forces. The entire range of cloths and fabrics were required: immense quantities of heavy duck and canvas, drills and twills for uniforms, broadcloths, the entire range down to the fine weaving of parachutes. Under pressure from the government, and in an honest attempt to be patriotic by supplying military needs, the mills pushed equipment and men to the breaking point to attain the tremendous production level required. During this time they learned how to operate on an around-the-clock program. Also instituted during this period was a widescale adoption of time study so that work assignments were based on actual modern time study methods rather than by rule of thumb or because of traditional standards. In short, the mills learned how to produce on a three-shift basis, with modern production methods and realistic work loads. They also found that it was much more economical to operate on a three-shift basis. In many mill men's opinion, the only profitable way to run a mill under the present economical conditions is on a three-shift basis.

Immediately after the war these identical conditions were sustained, with perhaps greater incentive, as there was a tremendous demand for all types of civilian fabrics. Sheets, men's wear, shirts—all were bought as soon as available and without regard to price or quality. This lasted until some time before the Korean scare, when business began to slump, and again picked up during the pre-Korean crisis when civilians began to stock up on items which they feared would become scarce.

Therefore the industry is just emerging from a very prolonged period of overactivity due to what may be termed the artificial causes of, first, wartime and military demands, and then the sudden release of civilian money for the fabrics which had been denied them for over four years. During these periods the industry can and should operate on a full-scale basis of three shifts, as there will be a market for consumption of the cloth made. However, in the opinion of many well-informed industrialists, without the aid of the export market which was once open and is now gone, the consumption of the fabrics produced cannot equal the production facilities.

The present slump is, of course, a very real slump which has been brought on in part by a rising consumer resistance to high prices and secondly by the carrying of huge inventories. However, the slump should not be compared to the volume of business of the last ten years but should be seen in the more realistic light of other more normal times. In other words, many very realistic mill men are beginning to realize that this slump will always continue with some degree of intensity as long as civilian and military demands are fairly normal. Even the present extensive military spending has not been able to account for the production of the mills, although many mills are operating exclusively on military orders. The mills which are being sustained by military orders have not, for the most part, been able to maintain peak production, in contrast to the general forecast of a year ago where war work was expected to keep the industry busy.

The above facts which have brought about the present condition of the industry are well-known and generally accepted. Three-shift operation and large inventories have been cited time and time again as being the major factors highlighting the present recession. However, there is one point that has not been brought out fully, and that is the tremendous modernization of the mills. During the war, the mills could not purchase new machinery and were required to operate around the clock month after month, year after year. There was little time for repairs or for periodic overhauling of equipment. After the war, the mills were reluctant to take machinery out of production except when absolutely necessary. As a result, machinery became worn out, while, at the same time, the mills had accumulated sufficient funds to purchase new equipment. At the end of the war, when textile machinery was again being manufactured, the textile machinery manufacturers enjoyed one of the biggest boom periods of their history. All types of machinery were in great demand and many improvements were made which increased the desire of the mills to replace existing installations. With the machinery manufacturers operating at capacity, and sub-contracting in many instances to increase production, practically every mill in the country was brought up to new levels of efficiency with new equipment. New equipment, being of advanced design, has further increased the productivity of the mills and therefore there is an even higher rate of production. What this means is that consumption was not able to meet the production of the mills even with old machinery and now the mills are trying to operate new machinery with greater production capabilities on a three-shift basis. It is quite obvious that there must be a reduction in either working hours or spindles if any semblance of balance is to be obtained.

Again, in the opinion of many textile industrialists, there will be a reduction in spindles in place or in operation. This reduction will probably be due to liquidation brought about by the competition between mills which is now developing. Looking back over the last year or so and in view of the present changes, there will be a certain amount of mill liquidation and the closing of many operations. Prices of finished products are low, raw materials are high, demand is very much down, and therefore the mills are operating with a very small margin of profit. The smart mill men realize this and know that they must take advantage of the economical savings to be gained from new machinery. They feel that the mill which is to live through this period must be operated on a high-production per man-hour basis to lower the cost per pound of yarn produced. They feel that their only protection is to purchase new machinery. Other mills, either because of insufficient funds or unprogressive management, are not willing to invest in large amounts of new equipment and these mills will not be able to make a profit where the spread from fiber to finished fabric is so small. These mills will be the ones to go.

Not all mills are feeling the present slump and some types of yarns are in good demand. Carded cotton fabrics, such as 80 square, are in a very bad recession. However, there seems to be a good demand for combed yarn and many mills are now either entering or attempting to enter this market. Mills which have spinning frames which will handle combed yarn are buying combers and converting to combed work. The synthetic yarn market is fairly strong, particularly where the newer fibers are available. Fancy and novelty yarns have been finding a good market, although the lots are generally small and the mill is forced to change over almost incessantly. Mills which are making worsted yarns on the new types of American system have found a steady demand for their yarns, particularly where they are making blends of wool and some of the newer wool type synthetics.

In concluding this survey of present conditions, it would seem rather unrealistic to be optimistic about the future, but, at the same time, it would be equally unwise to become too pessimistic. It would seem most sensible to readjust the standards of business level and to be prepared to operate on a smaller scale, except in times of national emergency. The concensus of opinion is that the industry is in for a long term of extreme competition while operating under a narrow margin of profit. To survive, a mill must have efficient machinery to lower costs and must have an aggressive merchandising outlet which will tell the mill what type of yarn and fabric should be produced and which will be able to sell the finished fabric.

Springs Office Building Features Novel Construction & Appropriate Furniture

WHEN something springs from the mind of Springs it can be counted on to have a good deal of bounce, and cause comment. He (Col. Elliott White Springs, president and general manager of the Springs Cotton Mills) has done it again—this time with an original, appropriately furnished building at Fort Mill which now houses the general offices, research department and cotton office for company plants in the South Carolina towns of Fort Mill, Lancaster, Chester, Kershaw and Grace.

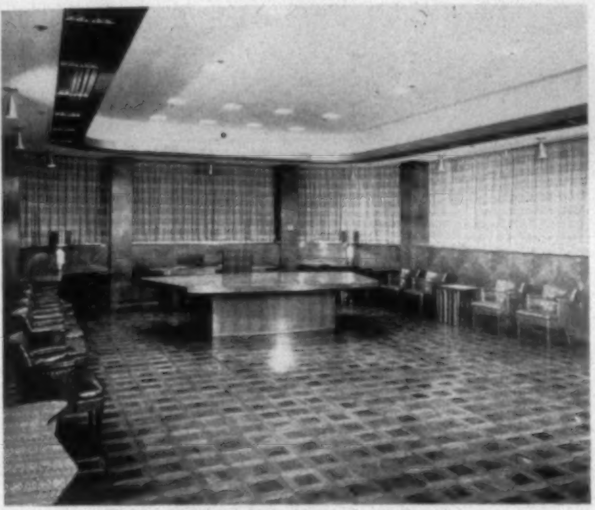
Due credit is given to Springs Vice-President E. L. Scruggs for construction of the building, to Robert & Co. Associates for the engineering, and to the Springs maintenance shops for designing the furniture, but it is obvious that Elliott Springs' talents and determination pushed the project to completion.

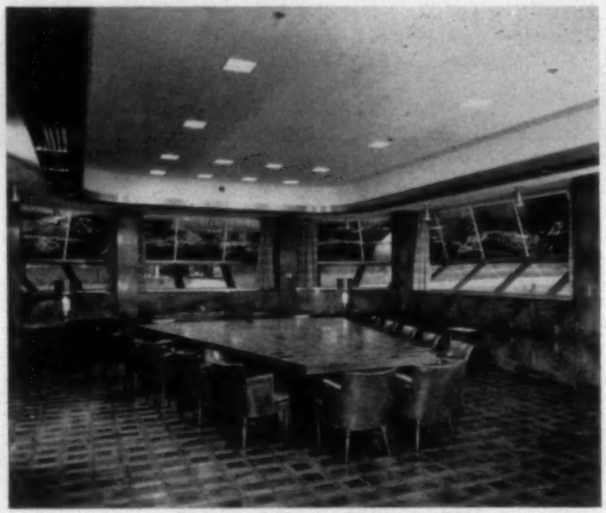
The two-story structure (244 feet wide at the front and 353 feet long) is of steel, concrete and brick, but unlike ordinary buildings, its walls are suspended from the roof and do not support it. This was done so that the windows might be set at an inverted angle of 45 degrees, thus permitting a maximum of illumination and a minimum of infra-red rays from the sun. The floors are concrete covered with teak in the office section, walnut in the president's office and directors' room, oak in the cotton department, maple in the pilot mill and research laboratory, and slate in the lobby. Both radiant heating and air conditioning are employed; the laboratory is refrigerated and the pilot mill has standard mill humidification. Carding, spinning and weaving operations can be carried out under typical mill conditions, and there is equipment to test cotton, yarn, cloth, chemicals, lubricants, starch, sizing, paint, cloth treating compounds, water, coal and building materials.

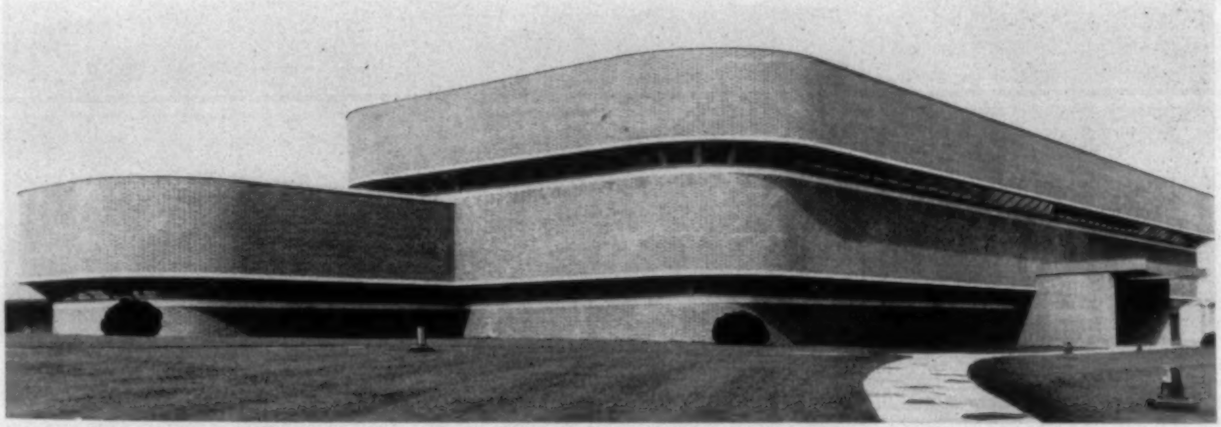
Particularly novel is the furniture in the executive office. Most textile offices will go as far as utilizing roving cans for trash baskets, but at Fort Mill the ultimate has been reached. The components are shuttles, creel boards, loom beams, picker sticks, lays, rolls, bobbins, screens, girts, cones, gears and jack sticks. Desk tops are made of woods very few textile men have ever heard of or are even able to pronounce. Draper Corp., Saco-Lowell Shops, Whitin

Machine Works and the late H. & B. American Machine Co. each contributed one piece of furniture from their respective shops.

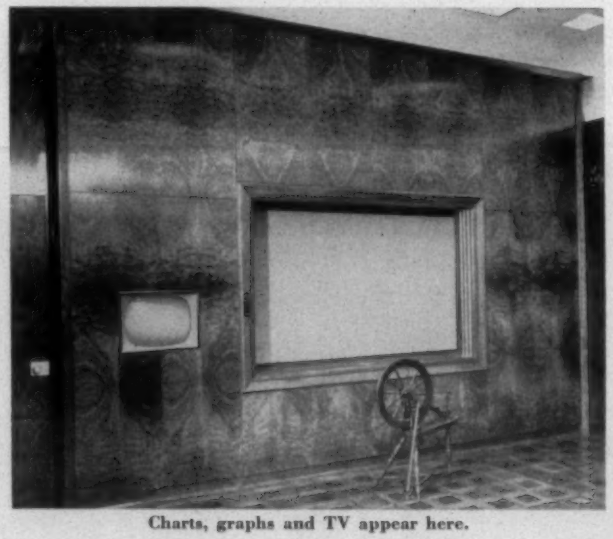
When approaching the front of the large building you see what appears to be a one-story nub attached to east side. It isn't a nub by any means. The only item which seems to have been left out of this office is a conveyor belt to transport the president from the door to his desk. A mural of the Lancaster & Chester Railway route mounted above the windows is 120 feet long. The president's desk is equipped with a control board, which actuates drapery controls, dictating machines, ozone and ultra violet lights, and—on the far wall—chart panels, television and radio. If the president isn't raising something else in his office he can push a button and cause an elevator to raise a portion of the floor so that his desk becomes a directors' table seat-


The president's desk (note fit of floor) . . .


. . . becomes, bingo, a directors' table.

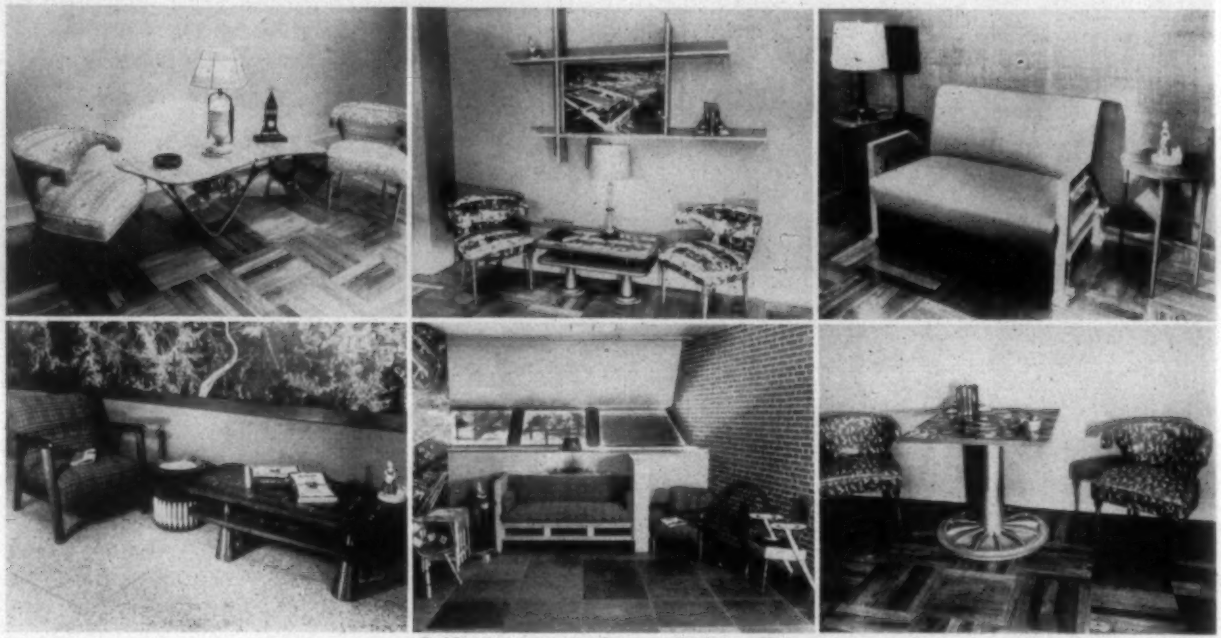

Front view of the office building; President Springs' headquarters is at the *left*.

Control panel on president's desk.

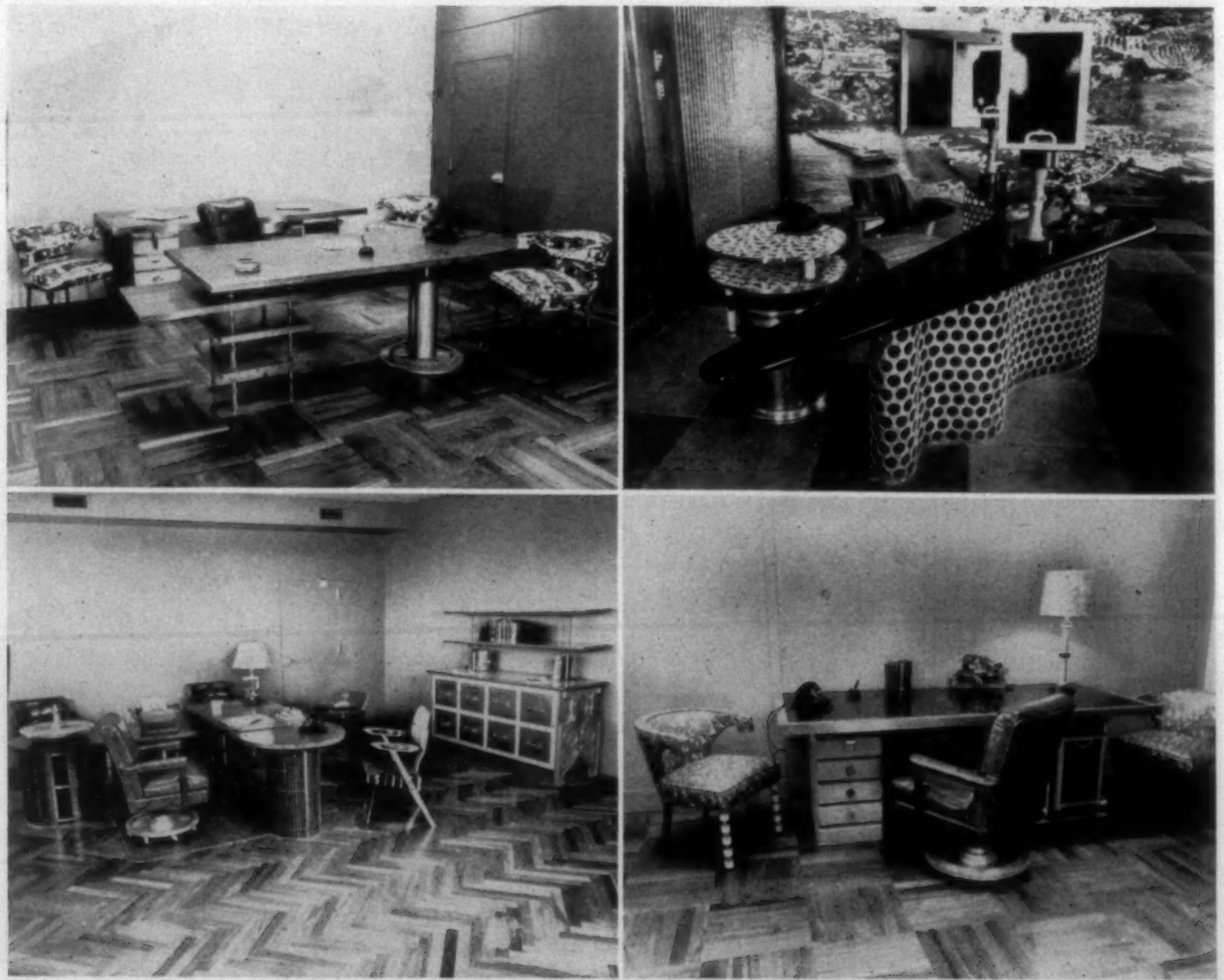

Charts, graphs and TV appear here.

ing 18 persons. When descending, it is said, the directors' table is able to put the squeeze on anyone sitting there.

Francis H. (Skeebo) Martin, who has been director of the Springs research department since it was establishe five years ago, is really in "high cotton" at Fort Mill Under his direction, a comprehensive variety of tests i



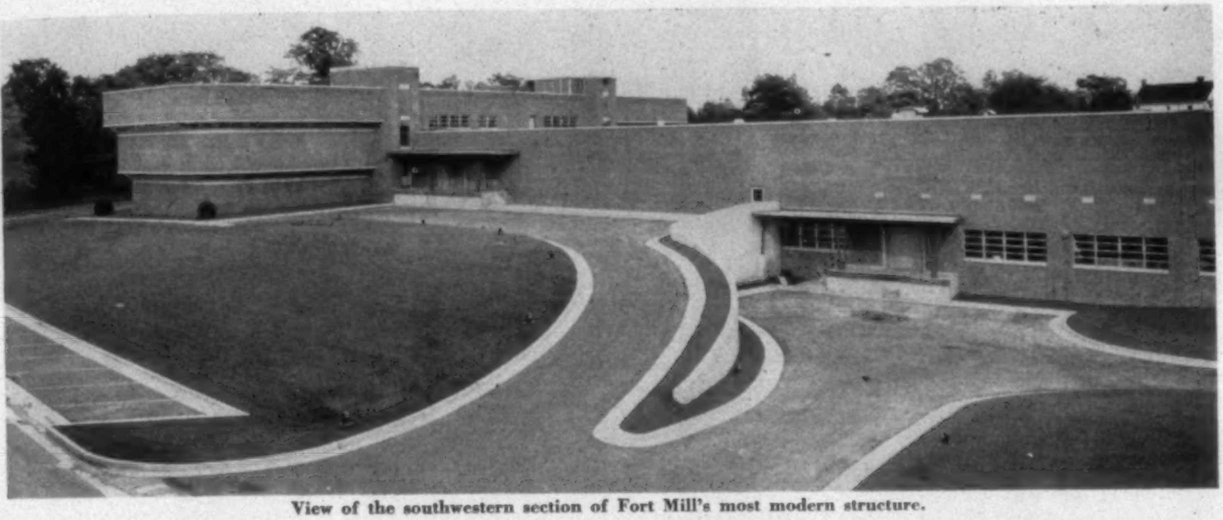
Lobby furniture in the new Springs office.



Desks were manufactured from a variety of junked textile machinery parts.

made daily and weekly on Springmaid products at each step from raw cotton through finished goods. As the result of work in the physical testing laboratory, neps, which in 1947 averaged 100 per 100 square inches of card web, have been reduced to between ten and 15 per 100; yarn grades have improved from D-plus and C to B and A-minus when compared to A.S.T.M. standards; break factor for yarns has improved from 1,700 to 2,300 with considerably higher drafts and single rovings being used.

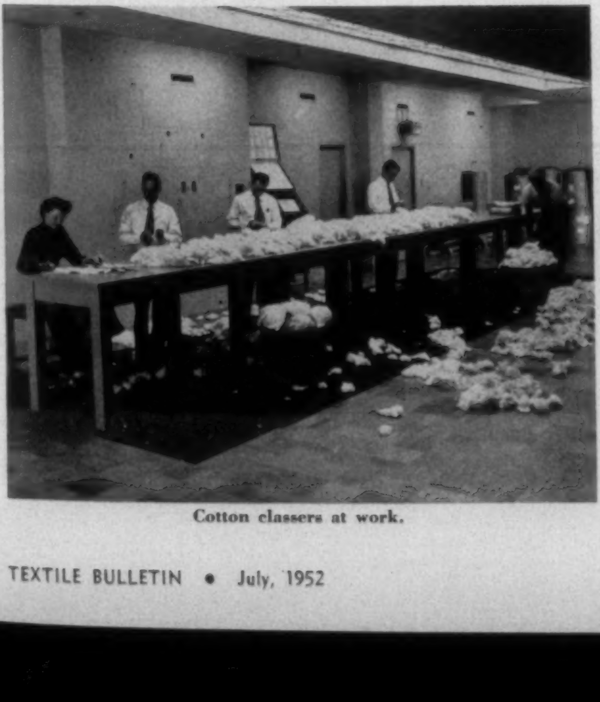
The figures cited in the foregoing paragraph indicate that this new building at Fort Mill is in no sense just a hobby, or notion.



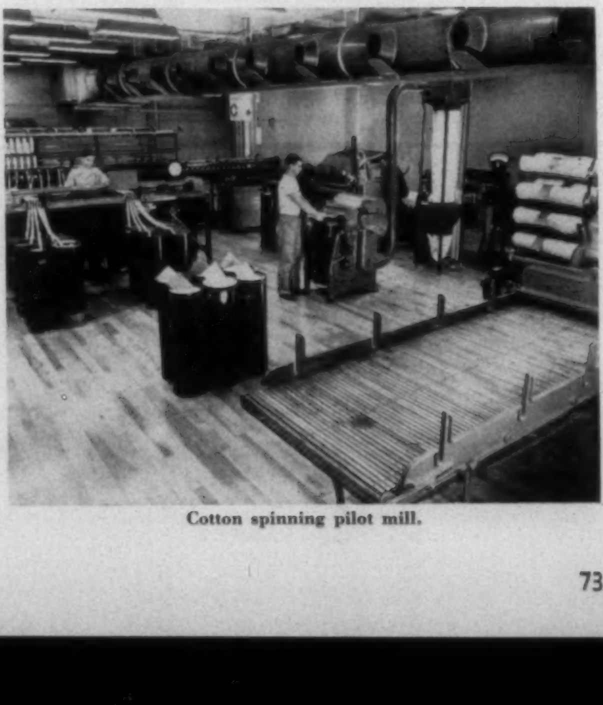
View of the southwestern section of Fort Mill's most modern structure.

The chemical laboratory.

Physical testing laboratory.

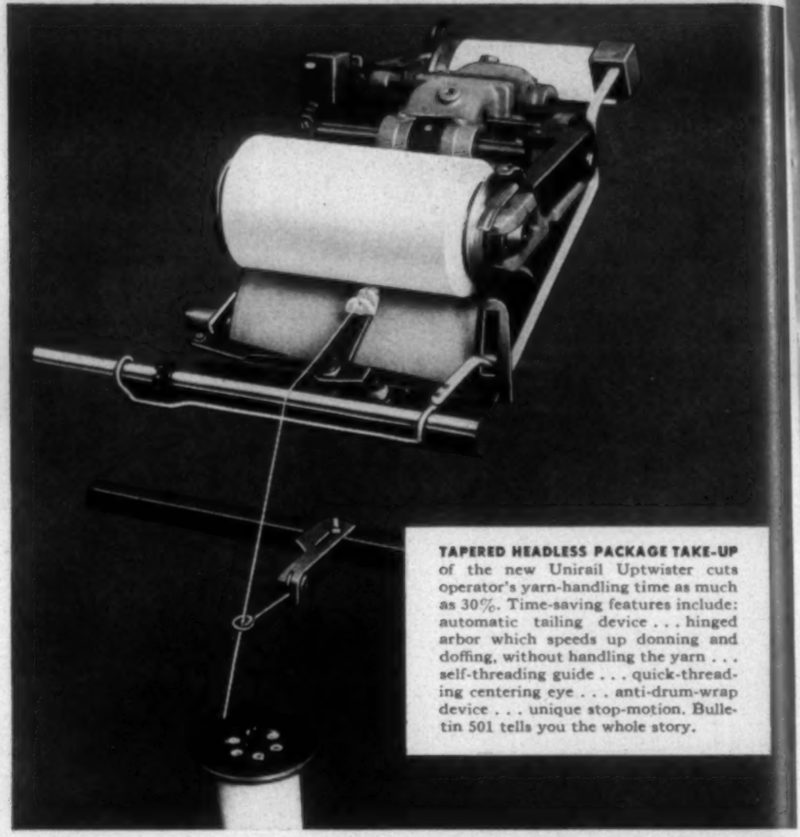


Cotton classers at work.



Cotton spinning pilot mill.

Reduce Yarn Handling Time 30%



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NEW BULLETIN 501 shows you in detail how the new Unirail Uptwister cuts your costs, speeds up production and improves yarn quality. Write today.

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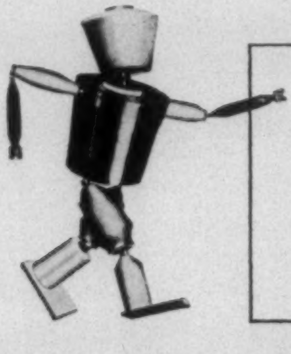

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Opening, Picking, Carding & Spinning

Georgia Textile Supervisors' Meeting

A BIG crowd of textile men from up and down the state of Georgia turned out for the Spring meeting of the Textile Operating Executives of Georgia in Atlanta. They met in the Harrison Hightower Building at the Georgia Institute of Technology to exchange information about carding and spinning practices in their mills. Alabama and North Carolina mills were also represented at the open forum discussion of questions about these operations. Well in advance of the meeting, these questions were sent out to 30 Georgia mills and mill groups, operating 1,561,026 spindles.

Robert J. McCamy, superintendent, Pepperell Mfg. Co., Lindale, Ga., who is general chairman of the group, called the questions "the best the association has ever had for discussion." Answers to these questions were returned to Herman A. Dickert, director, A. French Textile School, Georgia Institute of Technology, who is secretary-treasurer of the group of operating executives.

Below is a cross-section of the answers to the questions. Space does not permit the use of all the answers received. However, following most of the questions and answers in the first portion of the program dealing with carding are comments by E. A. Bentley, superintendent, Swift Mfg. Co., Columbus, Ga., summarizing answers received to the carding questions. Mr. Bentley presided over this part of the discussion period.

Carding

Question No. 1 polled the member mills on (a) their experiences with the 1951 cotton crop, and (b) the presence of excessive oil in the cotton they received this year. Mill AA reported extremely trashy cotton—believed to be mechanically picked—from some parts of the U. S. It recommended that for the best cleaning and appearance of cloth, such cotton should be used in equal proportions with locally-grown cotton. Concerning part (b) of this question, Mill AA said that it had experienced a lot of trouble with tar spots or black foreign particles which stuck in the flutes and caused bad laps. Mill officials never have decided just what this wet substance is but they do not believe it could have come from the dry belts.

Mill S reported more trashy cotton, more cotton seed fragments, and more whole cotton seeds than usual. This same mill went along with other mills in saying that an execssive oil content this year caused difficulties in the spinning room. It was pointed out that it was a lot harder to keep uniform laps in weight and evenness per yard. Another mill pointed out that trash in cotton had caused a higher fly waste in carding.

Mill BB reported that the yarn break factor on the 1951 cotton was up 10.5 per cent over the crop average for the year before. Mill HH said that tests had been run on the cotton used there and they showed five to eight per cent additional oil.

Mr. Bentley's summary: "On Question 1, there were a total of 22 answers. These answers covered the question fully. It was found generally that in some instances they were running better cotton this year than last, while in others the opinion was that the cotton was worse. From this, we would summarize that the cotton that the mill was receiving was dependent on the area from which it was bought."

Question No. 2 called for discussions about the use of the (1) gin-saw type opener, (2) air jet type cleaner, and (3) Superior pre-opener? Only a third of the mills which were queried answered this question and not all of these were able to back up the results they had noticed from these recently-developed openers and cleaners with exact data. Many said that more waste was taken out and there was a higher yarn grade as well as greater breaking strength noticed after these machines were used.

Mill P—where the Super Jet machine was used—reported that a lot of small particles such as leaves and dust probably were eliminated through the exhaust system into the waste tower. However, one mill said that a lot of chokes resulted from the use of a Super Jet when the cleaning line was handling 1,200 pounds an hour.

Mill O reported that its experience with the new type openers had been limited to the gin-saw. Tests run on low middling and strict low middling showed a savings of about one per cent in waste through the use of the opener and about 25 per cent less lint fiber in the waste which was taken out. The nep count at the card stayed about the same before and after the installation of the opener and the yarn grade was about a half a grade higher after the change. An increase of about five per cent in breaking strength was noted.

Mr. Bentley's summary: "Question 2 was answered by ten mills representing the three types of openers. To summarize this question we would state that each of the new type cleaners did have definite advantages and the mills using them were all pleased with their performance, whichever one they might have. It seemed that each of the machines definitely had a purpose and was filling that purpose well."

Question No. 3 asked for reports on how cotton was tested for maturity, fineness, and fiber strength. In most cases, the differential dye test was used for testing for maturity, the micronaire was used in testing for fineness, and a Pressley fiber tester was used to gauge strength.

Mill F uses a differential dye color test only when tests for fineness and strength indicate that such a check is necessary. Mill P reported that in testing for fineness, a sample of cotton from each bale was run through the micronaire. Readings for American cotton vary from 3.5 to 5.7. The most widely reported point of fineness for mixes was about 4.5 micrograms per inch.

Mr. Bentley: "On Question 3 there was a total of 17 answers. From the answers given by these mills, we would summarize that there is a definite trend toward the scientific selection of cotton. More and more mills are coming toward the analysis of their needs, then having a laboratory which will control the cotton as received."

Question No. 4 wanted to know what results mill men had obtained from the use of (a) Universal grid bars, (b) fringe rolls, and (c) perforated beater bonnets on pickers. According to some mills, Universal grid bars have increased waste removal, improved neps slightly, and reduced the quantity of spinnable fibers removed with the motes. One mill reported that there was no difference in lap variation with Universal grid bars, compared with the old type grid bars.

Mill C said that the use of the fringe roll had improved quality some, but that there was too much waste. Mill O reported that the fringe roll made a more uniform and even lap from side to side. This mill said that before the roll was installed the lap coefficient of variation was 1.20; after installation, it was 1.16. More than one mill reported better laps from the use of perforated beater bonnets. One said that the beater handled the air better and another said that the beater brought about a more even lap if the bottom was made air-tight.

Mr. Bentley: "On Question 4 there were 11 answers. The consensus was equally divided over the value of these grid bars. A portion of the plants reported that they had excellent results with the new type grid bars. Some mills reported that they did equally as well with the old adjustable grids. All mills having fringe rolls did report definite advantages."

Question No. 5 polled mill men on (a) what test controls had proven best for keeping lap uniformity within the mills' tolerance, and (b) what tolerance was used as a standard. In the answers to part (a) of this question, the Saco-Lowell lap tester won the most votes. Mill T reported using a scale weight to test for control of lap uniformity. The answer from Mill BB said that no regular checks were made on yard to yard variation.

Concerning part (b), Mill G reported that any lap which did not show 95 per cent within tolerance was checked again. Mill A stated that it used a standard for control of 1.05 coefficient of variation. Another called 0—1.50 a good coefficient of variation, 1.50—2.00 fair, and 2.00 and over unacceptable.

Mr. Bentley: "On Question 5 there were a total of 27 answers. All the mills answering showed that they did believe definitely in the fact that a good picker lap must be weighed and in every instance there were satisfactory methods for controlling the uniformity."

The next question—No. 6—called for discussions of the results noted from the use of either a high licker-in or cylinder speed. Mill F pointed out that, in the past, it had experimented with increasing the speed of the card with the licker-in speed stepped up to 575 r.p.m. and the cylinder speed up to 190 r.p.m. Production increased with the speed but a lot of good fiber was removed in fly and strips. Several mills reported that greater speed took out more waste—and also more good cotton.

Mill C said that fewer neps and excessive licker fly resulted. Mill R reported that with licker-in speed increased from 460 to 655 r.p.m., waste removal increased from 5.44 per cent to 5.55 per cent and that the nep count improved from 63 to 58 neps per 100 square inches.

Mr. Bentley: "On Question 6 there were ten answers. There was a divided opinion as to this question. The division was approximately equal. Some mills reported improved production and improvement in waste, whereas others did not have as satisfactory results."

Question 7 asked mill executives how much more sliver a can using a nylon trumpet would hold and the effect this has on variation. Mill D stated that the use of nylon trumpets on cards upped the sliver weight about 50 per cent. Mill M reported from 25 to 30 per cent more sliver in a 12-inch can. Mill O had found that 10.8 per cent additional weight could be put in a can when nylon trumpet was used on the drawing frame. No changes in variation were reported.

Mr. Bentley: "There were only seven answers to this question. Every mill answering reported that at first the nylon trumpet did put more sliver in the can—up to 25 per cent at the very outset. Mills reported, though, that they were wearing out rapidly and in some instances they had gotten back to their former standard after two months of wear."

The next topic was concerned with the mill officials' experiences with one-shot lubrication on openers, pickers, cards, or roving frames. Mill A reported that it had not been pleased with one-shot lubrication on three pickers, but that some changes were planned in the installation and better results were expected. The same mill said that one-shot lubrication had worked out very well on four 10 by 4 roving frames. The greatest advantage of the system seemed to be that it reduced oiling labor to a minimum.

Mill O said that it meant a marked reduction in supply cost. But Mill C complained that one-shot lubrication had given trouble with the joints leaking. As a result, the bearings beyond the leak did not receive the lubrication they should have received. Mill N said that one-shot lubrication had made it hard for operators to tell when it wasn't functioning correctly until a bearing burned and was replaced.

Mr. Bentley: "There were only nine answers to Question 8 and the conclusion to be drawn is that although one-shot lubrication is something that is definitely needed, there is still a lot of work to be done on it before it will be entirely satisfactory for all equipment."

Question 9 asked what changes had to be made on a picker when changing from seven-eighths cotton to 100 per cent viscose rayon, 1 9/16-inch staple. The beater speed was reduced at Mill E. On the front beater, speed was cut from 1,170 r.p.m. to 920 r.p.m. At Mill D, the picker hoppers were half filled with rayon and the speed of the lift aprons was reduced in half. Mill DD installed a Kirschner beater to replace a three-blade back beater. Its front beater was already a Kirschner, it was pointed out. Mill M put in bullet-nose beaters in place of a front Kirschner beater and a back blade beater.

Mr. Bentley: "Seven mills answered Question 9. These mills showed that it was necessary to make very few changes when converting from cotton to rayon or vice versa."

Question 10 called for a comparison of results from the use of three over four drawing with those obtained with normal four rolls or lap back drawing. All tests at Mill C showed a better sliver from the three over four roll system. This mill report went on to say that the plant had not been

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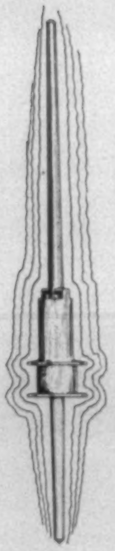

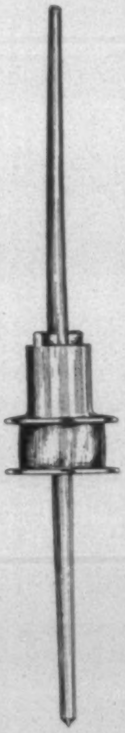

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able to operate this draft system successfully with low grade carded stock because of the presence of cut sliver which it had been unable to explain.

At Mill I, variation in carded sliver was found to be better on the three over four drawing. The variation on combed sliver at breaker drawing was said to be 14.7 per cent at Mill FF where three over four Saco-Lowell drawing frames recently began operating. The variation in finished drawing was 9.87 per cent. At this mill, the per cent variation on the normal four-roll drawing was from about 22 to 26 per cent.

Experiences with drawing using eight and ten ends up at the back was the next discussion topic. Information about the type of drawing and whether it was single or two-process was also sought. Mill D, which has one-process drawing, previously used six ends up and a solid creel. It has since converted to eight ends up changing to creeling a can at a time. The drawing sliver is considerably improved—and so is the running of the frames.

Mr. Bentley summed up the seven answers to this question like this: "The consensus of opinion was that while the evenness and the variation on eight and ten single-process drawing was better than that of the conventional two-process or lap back drawing, there still was more trouble in the spinning since the yarn was not quite as even and in some instances the ends down were higher."

Question 12 asked for a comparison between results obtained from the use of the new type single apron frame and from conventional types. It drew only four answers indicating very limited experience with the new roving frame. Mr. Bentley said that these four answers were equally divided as to the value of the new type single apron. Mr. Bentley said that answers to Question 13 asking for mill experiences with changing roving frames from 8 x 4 to 9 x 4½ and from 9 x 4½ to 10 x 5½ were also exactly divided. "Half the mills reported that changes were made without any trouble whereas the other half had every trouble imaginable," he summarized.

Another comparison—this time between results obtained from using a double apron roving drafting system and normal processing—was the next discussion topic. Mills were practically unanimous in reporting that they could draft higher with a double drafting roving system. But Mill DD said that it was using 8 x 4—six-inch double boss frames without much success and felt that it would get better results with single boss frames.

But as a general rule, the mills using the double apron roving drafting system expressed satisfaction with the results. The difference, if any, between the roving made on the front and back lines of spindles came up for airing as Question 15—the last in the carding part of the program. Generally, no significant differences were noted.

Spinning

Turner R. Scott, general superintendent, Martha Mill, B. F. Goodrich Co., Silvertown, Ga., was moderator for the discussions on spinning. The first spinning question that mill officials tackled dealt with the advantages of the Pneumafil cleaning vs. scavenger rolls in cleaning.

Typical advantages of the Pneumafil cleaning which were cited included: Mill I said that frames were slightly cleaner, flying ends were reduced and there were fewer gouts and slubs. Mill FF reported a better yarn.

Here are some of the advantages that were mentioned: Mill O reported that waste ran a little higher but attributed this to increased work loads which were assigned the spinners. Mill U attributed an increase in waste percentage to laxity on the part of the spinners. Mill R said that no improvement in yarn cleanliness and quality had been noticed as a result of equipping four frames with Pneumafil equipment, almost five years ago.

The next discussion topic on methods of overhead cleaning elicited a lot of answers. In many of the mills overhead cleaning is done with blow pipes. Generally, this is done every 24 hours. At least two mills clean every eight hours stopping the frames and blowing them out. Mill C said that most of its overhead cleaning was done by blowing with 60-pound compressed air pressure.

Underframe cleaners have given Mill U some—but not excessive—maintenance trouble. All in all, this mill reports that these cleaners are doing a first-rate job. At the time of the report, the mill had underframe cleaners on 17 frames and additional ones were being installed. This mill has also been very gratified with the results of their overhead traveling ceiling cleaners which complete their cycle about every 26 minutes. Mill EE reported that in 11 months of use two underframe cleaners had only failed mechanically once. That was when a stoppage occurred which apparently resulted from an accumulation of lint.

There was considerable interest in the next question which called for a discussion of experiences with high draft or 25 to 40 draft on spinning. Mill I uses both single and double apron equipment for higher drafts. It drafts .90 hank roving into 17s yarn—about 19 draft. The single system has been in operation only two months.

Considerable variation was noted in the ends down per thousand hours with high draft spinning. Mill A reported an average of 122.59 with double apron, 85.82 with single apron, and 35.20 with regular apron.

The next discussion dealt with experiences with synthetic and rubber aprons on Saco-Lowell-Roth long draft. One difficulty encountered in the use of synthetic long draft aprons included stretching which led to bad running conditions (reported by Mill A). This mill stated a preference for leather aprons. However, Mill EE said that leather aprons collected lint quicker than synthetic aprons did. And Mill DD reported that synthetic aprons soiled the pencil rolls, making more frequent cleaning necessary.

Most of the mills preferred synthetic covering for slip draft rollers, although some use leather. At least one mill (Mill I) doesn't use either type covering. Its rolls are chrome-plated and are giving good results.

Changing over from one type of long draft apron to another meant additional cleaning problems for only a few of the mills. Mill A said that more cleaning was necessary on synthetic aprons because of excessive loading. Mill N reported that, since this type apron did not carry the lint to the underclearer roll more cleaning on the steel rolls and cradles was required.

The next discussion centered on the frequency with which spinning frames were overhauled and also how often rolls were scoured. The majority of the operators said that they overhauled the frames once a year although some of the other answers to this varied all the way from a report of four times a year by one mill to once every two years

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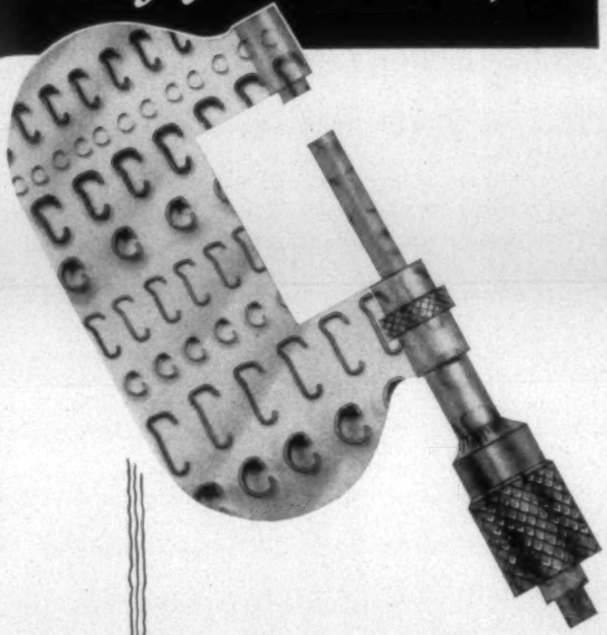

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by another. Most of the mills scour their rolls two, three or four times a year.

In answer to Question 22, an overwhelming number of mills expressed a preference for having roll pickers—instead of spinners—clean spinning. These mills concurred in reporting that, under this set-up, they got a better quality yarn as well as more efficient spinning operations.

A great deal of difference was noted in answers to the question about the maximum size hank roving that had proven practical to run single into Casablanca drafting system on spinning frames. Most sizes reported ranged from .50 to .90. Mill W reported that it was running a .55 hank roving and producing a 4.25 yarn and that it could run an 8.00 yarn from this same roving.

In answer to Question 26, methods which mills have adopted in creeling roving to keep from making slubs or soft places included these two: At Mill D, the ends are pinched off as near the roving as possible to eliminate a long doubling. Mill S instructs its spinners to overlap the new roving end with the old end about an inch and a half and also to twist the end of the old piece so that as much twist as possible will be taken from the roving.

The next question dealt with the use of snick plate settings for Barber-Colman spoolers. While some mills consider such settings satisfactory, a number of them reported that they were too close. Some said that using them resulted in high tailings, excessive cost, and too many breaks. A variety of methods of controlling wild yarn on these spoolers were cited. They included: installing bunch builders on the warp frames; close supervision of the spooler hands; and equipping the winder drum with bristle brushes.

Changing from 28-inch to 32-inch beam on B.-C. warpers does not necessarily entail trouble, the mill executives reported in answer to the next to the last question. But one mill found that the package was so heavy that the clutch plates and brake shoes began to wear. Another found it necessary to elevate the comb about four inches, raise pressure on the clutch operating arm and increase the lengths of the beam arms for the larger beam. This mill also noted that it became necessary to replace the clutch and brake facing about twice as frequently for the larger beam as for the small one.

The last question on the program called for discussions of the procedures followed in overhauling winders. The majority of the mills answering this said that they overhauled winders once a year. However, Mill D reported that most of its overhauling on No. 102 winders was done on the weekends, a section at a time.

R. W. Lawson, plant manager, Chicopee Mfg. Co., Gainesville, Ga., was re-elected to the group's executive committee. He had only been on the committee a short time filling the unexpired term of T. M. Hampton, superintendent, Hillside Plant, Callaway Mills Co., LaGrange, Ga., who was boosted to the post of vice-general chairman. Alex Fife, superintendent of Scottdale Mills, was also elected to the executive committee.

Report Studies Storage Of Seed Cotton

Seed cotton with a moisture content of not more than 14 per cent is safe to store for as much as several months without damage to grade, spinning qualities, milling properties, or viability of the seed, it was found in a study just completed by the U. S. Department of Agriculture. It was indicated that such extended storage in some cases may slightly decrease staple length.

Where seed cotton is to be stored with a higher moisture content than 14 per cent, provision should be made for circulating cool air through the cotton, according to the report on the study. It also was found that drying high-moisture seed cotton in storage by circulating hot air through the bins is considered too costly to be practical. Previously, no extensive tests had been made to determine closely the percentage of moisture that makes it unsafe to store seed cotton without drying it. Some in the industry had thought storage to be unsafe when moisture was as high as 12 per cent.

The report also presents data on the effects of different moisture levels in stored seed cotton on the germination of seed and the development of free fatty acids, and on grade and staple, and information on efficient arrangements and equipment of storage houses.

The report, "Conditioning and Storage of Seed Cotton with Special Reference to Mechanically Harvested Cotton," is based on a study made co-operatively by the cotton branch of the Production and Marketing Administration and the Bureau of Plant Industry, Soils and Agricultural Engineering of the Agricultural Research Administration. The study was made under authority of the Agricultural Marketing Act of 1946. A copy of the report may be obtained from the Office of Information Services, Production and Marketing Administration, U. S. Department of Agriculture, Washington 25, D. C.

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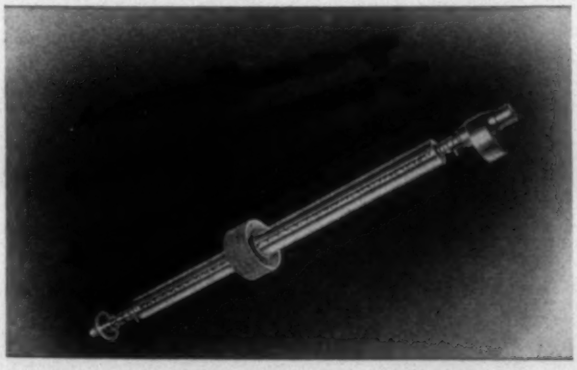

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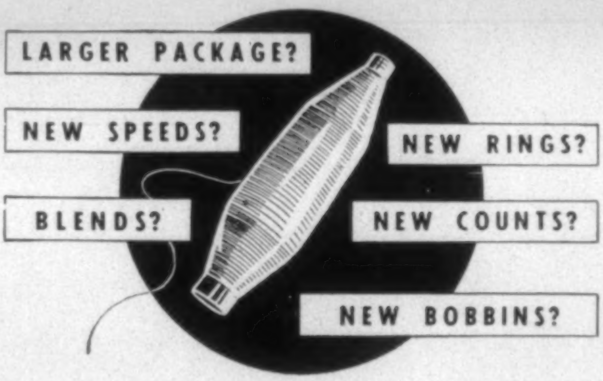
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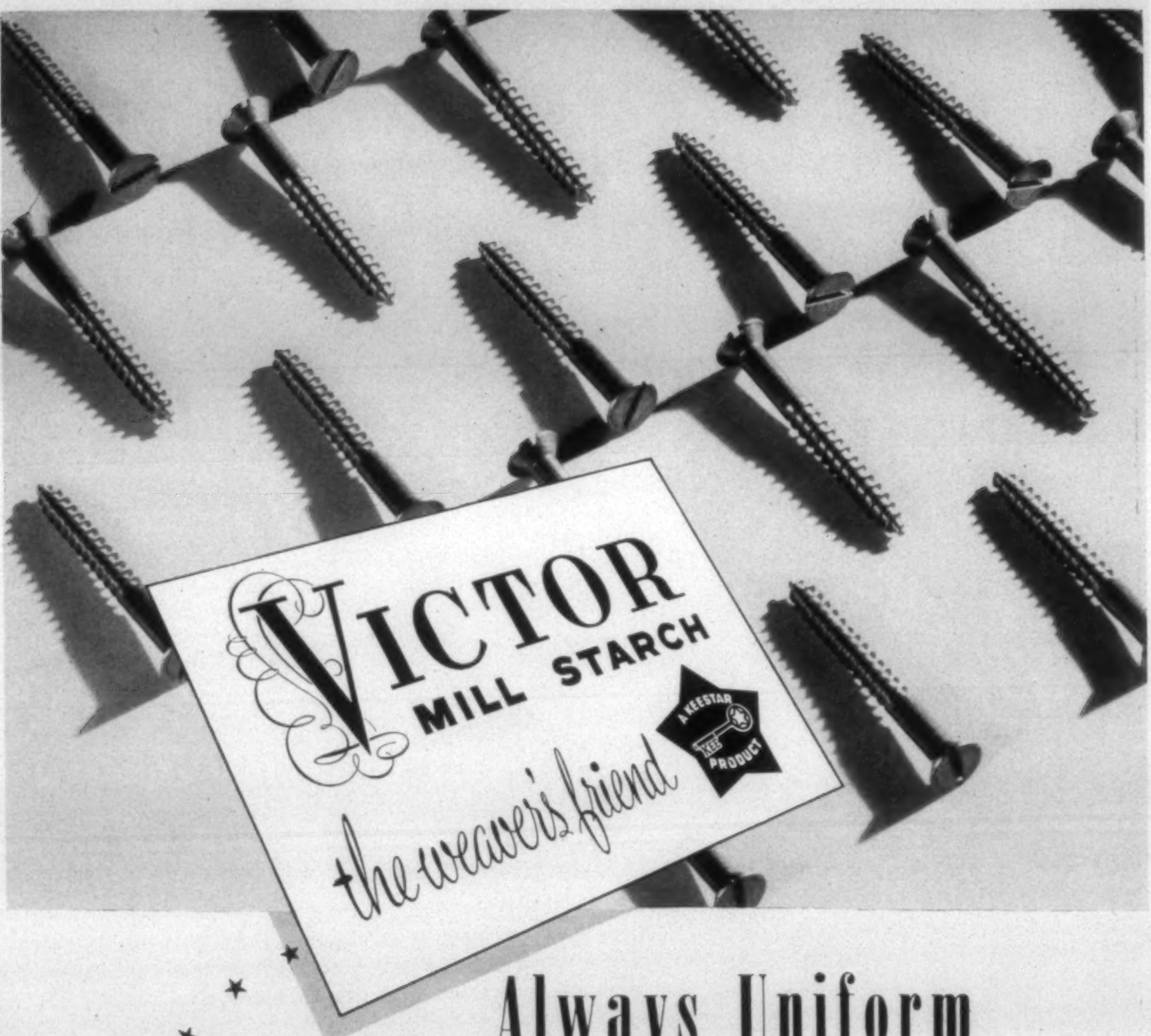

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By FRANK D. HERRING

Part 37 – Training of Loom Fixers

MOST weave room supervisors require that loom fixers check over the looms on their sections each day on each shift, but this checking of the looms and the fabrics being woven is worth very little to anyone unless the fixer is trained and knows what to look for while he is checking. The instructor should start the beginner off right on this important phase of the loom fixer's work by teaching him an orderly procedure to follow. Some supervisors have someone other than the loom fixers do this work, but regardless of who is required to make this daily check of the looms, the loom fixer should also be trained to do it, and do it on his section, because this is the one sure way, too, for the fixer to stay ahead of his job, and prevent so many of the looms from being flagged by the weaver and having to be stopped off and wait for the fixer to get to them.

If each of the fixers, on each shift, will check over the looms on their section they will find many things which will be in need of minor adjustments which can be attended to in a few minutes, and if done, will prevent many breakdowns which would cause hours of lost production from the loom and unnecessary additional work for the fixer, or overhauler. I have had much to say about preventive loom fixing through this series of articles, and the fixer checking over his looms while they are running and finding and attending to the little things before they become big jobs is certainly the very best of preventive loom fixing.

I have observed loom fixers at many mills checking over their looms while they were running, and I think I am being very conservative when I say that the foremost objective among 90 per cent of them was to hurry and get over their section of looms rather than conscientiously try to find something in need of adjustment. I think the primary responsibility for bad cloth should be placed on the weaver, and I think the primary responsibility for keeping the looms fixed should be placed on the loom fixers.

It is of course necessary to have the second hands, or head loom fixers or someone else check over the looms daily to determine if the looms are being kept in good condition, or more for a matter of record to determine which of the loom fixers' sections are not being kept up.

The overseer should be given a daily report on the bad looms found by these inspectors and he should record these loom numbers in such a way as to enable him to readily determine the sections which are not being properly kept up. One of the most disturbing things to the loom fixer's morale is to have inspectors going over his section flagging looms and writing notes about what should be done to the looms. When this is necessary, it indicates one of two things—either the weavers and loom fixers have not been trained properly so as to be able to keep the looms in good operating condition, or the looms are all in a run-down condition. If the looms are in such condition that the loom fixer does not have time to do anything except fight flagged looms all the time, the looms should be overhauled and put in good running condition, and then a system of checking and follow-up should be inaugurated which will keep them in running order, and making good cloth.

Whenever defective cloth or looms out of fix are found by whoever is checking over the looms they should call the weaver's attention to it, because this will train the weaver on the things to be watching for, because the weaver is an important member of the team, and full co-operation from all parties involved is necessary to get the job done correctly and with the least effort and loom stoppage. This is a responsibility of the supervisor, as of course it is to the best interest of all parties for him to make them realize fully that full and complete co-operation is the only way to get the job done efficiently and harmoniously.

As previously stated, the fixer should check over his section for shuttle boxing immediately after change time on each shift. The check I am referring to now is a general check of the looms, and should be done by each fixer on each shift, and it will sometimes have to be done intermittently, as the fixer should keep a lookout for looms flagged and go and get those looms in operation and then come back to where he left off on his checking. However, if the looms are once put in good condition, and the checks which I have suggested and will suggest are made correctly on each operating shift there will not be very many looms flagged by the weaver, because the fixer will always be ahead of the job, and of course our primary objective is to keep the looms running and producing.

The instructor should go with the trainee when he is making these checks until he is sure that the trainee has learned the things to check, and also what to do about the things he finds out of order. All Draper looms have the battery mounted on the right-hand end of the loom, and when the fixer is making this general check over the loom he should always start at the battery end, and never try to check two looms at the same time, because this would get him crossed up and confused on the routine procedure and make it impossible for him to avoid overlooking some of the parts which should be checked. The following are the things which the fixer should check, and to save time and avoid confusion and omissions the parts should be checked in the order named. I will also list the things to do, and the reasons why.

(1) *Bobbins in bobbin can*—When using a filling feeler, and nearly all mills do, all of the bobbins in the can should have a small amount of yarn, the bunch, left on them. If one or more of the bobbins in the can have no yarn left on them it is a sure indication that the filling feeler is not working properly, or that the filling was put on the bobbin without a bunch, or that the bunch was not put on the bobbin in the proper place. The fixer should determine the trouble, and if it is a fault of the filling feeler he should make the necessary adjustments; if he finds the fault is in the way the bunches were put on the bobbin, or failed to be put on, he should report this to the proper authorities immediately, because if a few empty bobbins are found in the bobbin can it is a sure indication that all the yarn is being run off of the bobbin before the transfer is made, and this will make mispicks in the cloth. Sometimes the above-mentioned trouble is caused by the transfer mechanism failing to work properly. We refer to this as false changes, or the shuttle feeler having the limber neck, failing to get up in its proper place and line the latch finger with the bunter, or sometimes it will be found that the shuttle is going into the shuttle box on the battery end late and the tip end of the shuttle feeler will strike it causing the latch finger to be depressed and prevent the transfer of the bobbin. The shuttle bouncing, or failing to go all the way up in the shuttle box will cause the same trouble. If the shuttle feeler is striking the shuttle the fixer can easily determine this by removing the shuttle from the loom and examining it, as the tip end of the shuttle feeler will mark the outside front wall of the shuttle. After the fixer has made the adjustments to correct these troubles he should put a near empty bobbin in the shuttle and start the loom and watch to see if the transfer is made properly, and it is wise policy to repeat this three or four times before leaving the loom. The above-mentioned checks will prevent the weaver from having to stop off and flag many looms, and will also prevent many seconds from being made.

(2) *The parallel assembly, pick arm, lug strap and picker stick on battery end of loom*—The parallel assembly consists of the parallel, parallel plug, parallel spring, parallel spring shell and stud, parallel tongue and bolt, parallel shoe and parallel spring strap or heel strap. If any of these parts become excessively worn, or loose, it will cause the loom to slam off occasionally. The parallel assembly takes a lot of punishment when the loom is in operation, and these parts will become worn and work loose unless they are kept well oiled and tightened. So, it can readily be seen that the loom fixer is taking work off himself, and also running his job much more economically when he checks these parts often and keeps them in good condition. The pick arm, lug strap, lug hanger should be checked to determine if they are tight and in proper adjustment; if they are not it will cause the loom to slam off occasionally. Also the picker stick should be checked to determine if it is excessively worn or split, as either of these conditions will cause the loom to slam off.

(3) *The breast beam bolt and dowel pin on battery end of loom*—On the later models of Draper looms the breast beams are much more firmly secured to the loom sides, and do not work loose as readily as on the older looms, but regardless of the model loom it is wise policy to check this item, because if they are just a fraction loose it will prevent orderly transfer of the full filling bobbins from the battery into the shuttle, and this will result in trapped bobbins, broken bobbins, burst shuttles, bobbin breakouts, broken hopper or battery stands, broken front and back box plates, and of course sometimes hours of loom stoppage, etc. The breast beams are secured in place with bolts and also dowel pins, but if the loom is allowed to run with the bolts slightly loose lost motion will soon be created and the dowel pins will become worn to a point where it is necessary to drill new holes and replace them, but if the dowel pins are tight and the bolts are checked daily it will never be necessary to replace the pins.

(4) *The filling motion thread cutting knives*—Whether using the old type thread cutting device, with the cutting knives attached to the shuttle feeler, or the improved Stafford thread cutter, it is wise to check the knives while the loom is running and the knives are back in rest position, and if there is not a severed stand of filling cut cleanly and being held by the knife guides, something is out of adjustment, and the loom should be stopped off and the trouble located, because if this cut strand of filling is not being held it is sure indication that the knives are not cutting the filling on the transfer, or that the strand of filling is being released or pulled out of the knives immediately after transfer is made, and this will make jerk ins in the cloth. A number of things can cause this strand of cut filling to be missing from its place between the thread guides. The things that usually cause this trouble are as follows: the shuttle bouncing or failing to go all the way up in the shuttle box on battery end; the picker excessively worn on battery end, or the shuttle rising in the box, as either of these things will allow the tip ends of the cutting knives and thread guides to strike the front outside wall of the shuttle and prevent them from getting into cutting position; filling bobbin being run empty of yarn (in this event there would be no thread in place to cut); the shuttle feeler and the entire thread cutting arrangement out of adjustment; worn or burred places on the leather covering on the right-hand front box place, as the severed thread will be caught by these burred or worn places and be pulled out of the thread guides as the lay moves back after the transfer is made; temple thread cutter failing to cut the strand of filling after transfer, as this will allow the strand of filling attached to the selvage of the cloth to be carried forward and be drawn out of the thread guides; the thread guides excessively worn or too loose; broken strands of filling extending from the bobbins in the bobbin can up through ~~the~~ picker stick slot in the right-hand lay end plate and wedged against the front box plate. If these threads are present, it is a sure indication that the thread cutting knives are failing, part of the time, to cut and hold the strand of filling, and this will sure make jerk ins. If the cutting device is working right the strand of filling will be cut clean, and the falling bobbin will pull this cut strand attached to the bobbin down into the bobbin can, and completely clear of the shuttle box, or lay end plate.

(5) *The right-hand temple and temple thread cutter*—Check the temple and determine if it is in good condition, and also make sure that the temple is properly set in relation to the race plate. Also make sure that the temple

thread cutters are in good working order, because if the temple thread cutters do not cut the threads promptly and cleanly after the transfer jerk ins and stringy selvages will result. Also the fixer should make sure that the temples and the temple thread cutters are well lubricated. A few drops of heavy oil applied to the thread cutters about once a week will more than double the usable life of them, and also prevent lots of seconds.

(6) *The harness, including tape harness if being used*—The harness settings can be checked to determine if they are shedding right, and also see if they are properly set in relation to the race plate without stopping off the loom.

(7) *The cloth*—This is where the trainee will need the help of the instructor, because too many loom fixers never learn as much about cloth as they should know. He should be trained to look for the following: bad selvages, and there are several types of bad selvages; puckered, or slack places in the cloth, this usually caused by broken or loose take-up roll covering; uneven or wavy cloth, caused by faulty operation of the take-up or let-off motions (this is sometimes very difficult to detect while the cloth is on the loom, but can readily be detected when the cloth goes to the inspection department); reed marks, and other streaks in the cloth (these are caused by bad reeds, the temples, or the harness); cover or face on the cloth, one defect that the average loom fixer will overlook, and is one of the most vitally important.

Six things are contributing factors to the appearance of the woven cloth; they are: tension on the warp yarn, setting of the whip roll, stop motion girt, the harness, the take-up roll, and the timing of the harness cams. The tension on the warp yarn will vary on different fabrics for best results. The harness cams should be timed so that the harness sheds will be wide open when the lay is on front center. And the other parts mentioned should be set at a point high enough to insure that the top sheds of the warp yarn is much slacker than the bottom sheds when the harness sheds are wide open. (These settings, and the reasons why have been fully covered in previous installments of this series or articles). The instructor should be familiar with all these settings, and he should make sure that the trainee thoroughly understand the hows and the whys about these things before he pronounces him to be a loom fixer and ready to go it alone. Face or cover on cloth is so vitally important that it should be impressed on all the loom fixers' minds that just a few looms on one section making reedy or uneven cloth could, and sometimes does, mean the difference whether the mill gets repeat orders or not, or whether the mill operates on full or curtailed schedule.

(8) *The filling fork*—The filling fork should be checked to determine if the prongs of the fork are striking the filling fork grate, as this will prevent the loom from stopping off when the filling breaks, and will result in mispicks and thin places in the cloth. This check can be made while the loom is in operation. Also the fixer should depress the filling fork loop by hand to make sure that the filling motion shipper will release the shipper handle and stop the loom off, because if it does not release the handle mispicks and thin places will result. At this point the fixer should also check the release lever links to determine if they are adjusted to release the take-up clutch when the filling breaks and the filling fork loop engages the filling motion hook and stops the loom off.

(9) *The parallel assembly, pick arm, lug strap and picker stick* should be checked on the shipper end same as given in item (2) for the battery end of loom.

With a capable instructor, I am convinced that if the trainee is given the instructions and training laid down in these articles he will be able to take it from here and run a section of looms with very little help from others, if any. I know the question will come to many readers' minds as to where they can get an instructor who is capable of doing the things which I have mentioned herein. Of course there are not too many of them running loose. But a man who is capable of doing the job can usually be obtained by contacting the nearest loom builder's supply and service office, as the service man working out from these offices know the men who are available in their territory. As a rule, the best type men for this work are old men who have had years of experience as overseers, or supervisors, and have reached an age where they do not care to assume the responsibilities which go with this type of work.

Fabric Volume Contains Swatches And Analyses

101 Fabrics, Analyses and Textile Dictionary: by J. J. Pizzuto, B.T.C., and P. O. D'Alessandro, B.S.; Textile Press, 140 Cedar Street, New York, N. Y. *101 Fabrics* presents a study of various types of woven fabrics by including a swatch of each fabric plus a complete analysis covering fiber content, gray and finished width, finished weight in yards per pound and in ounces per square yard, gray and finished yarns per inch, warp and filling yarn numbers, warp and filling twists per inch, type of weave, warp and filling tensile strength, plus incidental comments relative to type of finishing, etc.

All information given for each sample was obtained from standard textile laboratory tests made on the finished material; such values as gray widths and constructions were calculated from measurements also made on the finished material.

The dictionary-glossary of 53 pages is noteworthy in respect to its close integration with the sample section of the book, making it possible to see by referring to the sample of cloth what may often be difficult to visualize from a definition alone.

Mr. Pizzuto, a specialist in fabric analysis and textile testing, is presently an instructor in the textile department of the Fashion Institute of Technology, New York, and also chairman of the textile department at New York City's Central High School of Needle Trades. Mr. D'Alessandro was formerly with Macy's bureau of standards and the Better Fabrics Testing Bureau, and is at present manager of the New York testing laboratory of Deering, Milliken's fabric development division.

Their volume will find its principal use in the hands of designers and cutters.

Thomas J. Willis and William A. Smith of Greenwood, S. C., have been issued two patents Nos. 2,571,510 and 2,571,509. Both of these patents relate to improved means for controlling tension in warp yarns of a loom. In the usual operation of a loom, when the loom is stopped, the tension in the warp yarn is relaxed which will cause a mark in the fabric upon the loom again being started. Both of these inventions cover improved means for maintaining tension in the yarn to thus eliminate marks in the finished fabric.

Bleaching, Dyeing & Finishing

Reducing Static Electricity On Fibers Through Chemical Application

By A. CHEMASTER — Part Two

PRACTICALLY all hydrophobic fibers, as well as wool, can be treated during both manufacturing as well as finishing operations for improved handling during the garment cutting and processing operations. Hydrophobic fibers include nylon, Orlon, Dacron, Acrilan, acetate, dynel and X-51.

In the preparation of hosiery and tricot yarns for improved anti-static properties during knitting operations, it has been found that the newer types of cationic anti-static agents when used in combination with non-ionic compounds and necessary mineral or vegetable oils, can be applied by one of the standard methods. The non-ionic agents act as emulsifiers for mineral or vegetable oils, making for a more stable preparation media than when soaps or sulfonated compounds are used.

All finishing plants which prepare goods treated with these cationic type anti-static agents should be properly advised so they can work out proper methods of removal, or otherwise the cationic anti-static agent remains partially in goods and will affect the dyed shades and finish as well as not provide any particular anti-static value.

It has been found from practice that it is best to use, on goods made from the specially anti-static treated yarns, scouring compounds free from sulfonated detergents, oils and soaps. Amine condensates, alkylated phenol non-ionic in combination with soda ash or caustic, or caustic (permissible for use on nylon), will give a satisfactory scour or boil-off and remove all traces of the cationic compound prior to dyeing or bleaching. Sulfonated compounds such as Duponol, Orvus and Igepon do not remove these cationic agents entirely.

On the finishing of tricot and woven fabrics these anti-static agents may be applied in the final rinse after dyeing, or later, after goods are extracted and ready for drying on the frame on the padder or quetsch. Only sufficient amounts of anti-static agent should be used to free the finished goods of static accumulation when hosiery is being boarded and laid in lots ready for the inspector. Finished goods made from nylon or other hydrophobic fibers must be free from sticking together, and not generate static when the garment manufacturer cuts them.

It has been found desirable to incorporate hydrogenated waxes in with anti-static agents so as to give the cutter better lubrication during his cutting operations, since usually anti-static agents do not possess the desired lubricating properties in sufficient quantity to prevent overheating of knives.

A majority of these anti-static agents which are substantive in nature possess this property both on the hydrophobic fibers as well as the cellulosic fibers such as cotton and viscose yarns, so care must be exercised wherever there are fiber blends.

In evaluating the practicability of using anti-static compounds during manufacturing operations on staple fibers, the following suggestions are offered: Solubility in water or in an emulsification-dilution may be determined from recommendations and small-scale tests; stability of the solutions and diluted emulsions should range from acid to alkaline (2.5 to 12 pH); the solutions and emulsions must be stable in cold to 200° F., and should not break when yarns are steam set; special note must be made to determine whether solutions or emulsions are compatible with colloidal silicas and, if compatible, do they still retain their anti-static properties or are they neutralized.

Measurement of anti-static values may be carried out on new evaluating equipment, as discussed in "Measurement of Static Electricity on Fabrics," Hayek and Chromey, *American Dyestuff Reporter,* Vol. 40, No. 57, as well as others that are now being offered on the market or are available at various textile testing firms.

It is reported that the producers of the more outstanding anti-static agents now have test units which can be used in the plant after trial runs have been made. The static measuring units give measurements in micro-amps, showing a full charge in ranges of one to four minutes, and then life of these charges on treated and non-treated yarns and fabrics.

Some of the firms which have done outstanding work on the development of anti-static agents for the hydrophobic fibers, as well as wool, include Drew, Nopco, Dexter, Proctor & Gamble, Warwick and Onyx. Other firms are working along other lines of development, which may give permanent types of anti-static agents for finishing of goods.

The following is suggested as a method of making comparative application trials on anti-static materials, whether in water solution, solvent spray, oil emulsion, etc.:

Compound 1 (anti-static agent soluble in water or solvents)
" 2 (anti-static oil possessing great emulsive stability)
" 3 (Compounds 1 and 2 properly blended with stability equal to 1 and 2)

On all hydrophobic stable fibers before carding on American system use 0.1 to one per cent Compound 1 in solvent spray; do the same on all tow on entering Pacific converter. For staple hydrophobic fiber (woolen system), repeat Tests 1 and 3 using 0.5 and one per cent Compound 1 in water solution. For regular woolen operations, or on wool under low relative humidity, use straight five per cent emulsions separately of Compounds 2 and 3.

Many other tests can be rigged up from typical anti-static compounds as listed, and from these plant trials the manufacturer can obtain data that will help both himself and the finishing plants. The finisher then can check the best methods of removal in scouring and if it is necessary to employ solvents in scouring to give a complete removal of substantive anti-static agents prior to dyeing and finishing.

Shrinkage Measurement Standards Proposed

A group of 33 textile experts from 12 nations, working at Columbia University as a sub-committee of the International Organization for Standardization, has reported marked progress on development of a set of international standards and specifications for measuring the shrinkage of textiles.

W. D. Appel, chief of the textile section, National Bureau of Standards, chairmanned the meetings and headed the 11-man American delegation. Basis for the textile committee's discussion was a standard prepared and submitted by the American Standards Association for the U. S. "Shrinkage in Laundering of Woven Cotton, Linen and Cotton-Linen Fabrics." The following action was taken on the U. S. proposal.

(1) The French asked for a broadening of the scope to include hemp and mixture of synthetic fabric fibers. The proposal was turned down, but the committee will give later consideration to the matter of hemp.

(2) The committee agreed to eliminate preliminary drying prior to extracting and pressing.

(3) The committee agreed that wash wheels shall be not less than 18 inches in diameter, have one to three baffles, and rotate at a speed which will lift and drop the materials (peripheral speed of 176 feet per minute is satisfactory), reversing every eight revolutions. It was agreed that there should be facilities for rapid heating of the washing liquor (live steam, gas, electricity are satisfactory).

(4) Liquor to air dry fabric ratio: the goods shall be covered with liquor but in no case shall the liquor to air dry fabric weight exceed a ratio of 20 to 1.

(5) Air dry fabric to cage volume ratio was agreed on at 2.8 to 3.2 pounds per cubic foot.

(6) An extractor shall be used, or substitute methods which will reduce moisture retention to 50 to 60 per cent based on air dry weight of material.

(7) Pressing equipment: the committee agreed on a preference for flat bed press with a hand iron as alternate. Since the pressure exerted on the hand iron is important rather than the weight of the iron, the weight faactor was eliminated. Members will check individual practices to see if suggestion of 30 to 35 grams per square centimeter pressure is satisfactory.

(8) Measuring scale: the committee agreed on use of a graduated rigid measuring rule for laying out marked distances before and after laundering.

(9) Test specimen: the committee agreed on a minimum size specimen of 22 by 22 inches. There is to be no maximum size limitation. Specimen shall have no marks closer than two inches to any edge and marks shall be staggered if possible. The U. S. delegation agreed to attempt revisions of the A.S.T.M. specifications, federal specifications, and American Standards as required by these agreements.

(10) The committee agreed on following order of operations: Add approximately two grams per leader of sodium carbonate; raise temperature of liquor and maintain at 95° centigrade minimum; add sufficient soap chips to give good running suds. (If more than five grams per leader of soap is used, the amount and reason for use of excess shall be reported). It was agreed that standard specifications for soap modified as needed for international use should be included in the body of the standard.

(11) Time of washing and rinsing cycle: The delegations were unable to agree on the duration or need for repetition of tests until ultimate shrinkage is obtained. The U. S. delegation favored the test as outlined in its proposal involving a 40-minute washing cycle and a total duration of test of 60 minutes. The United Kingdom favored a 60-minute washing cycle with a total duration of test of 90 minutes. The French favored shorter washing runs repeated five times, with a total duration of 200 minutes.

(12) The committee agreed that the report shall contain the average shrinkage or gain values in the warp direction and filling direction separately, as a percentage of the dimension before laundering, but not beyond the first decimal place, as the shrinkage, or gain, of the specimen in the test.

The U. S. delegation, as secretariat of the subcommittee, agreed to redraft the proposed standards, including agreements reached, and to send the revision to each member, together with statement covering the unresolved matters, concerning which each member body will continue its investigations. The foreign nations represented were Belgium, Brazil, Denmark, France, Germany, India, Italy, Spain, Sweden, Switzerland, and the United Kingdom.

In addition to the chairman, the U. S. delegation consisted of: J. Robert Bonnar, vice-president, American Association of Textile Chemists and Colorists, New York; Larus R. Burgess, Cone Mills, Inc., New York; D. E. Douty, chairman, and G. R. Turner, both of U. S. Testing Co., Hoboken, N. J.; Julius B. Goldberg, director of research, J. P. Stevens & Co., New York; Fred Kern, F. P. Maupai Dyeing Co., West New York, N. J.; Leonard S. Little, Better Fabrics Testing Bureau, New York; J. A. Truitt and Dr. C. O. Werner, both of the American Viscose Corp., Marcus Hook, Pa.; Dr. John Warner, Cluett, Peabody & Co., New York.

Army Reports Cut In Blanket Shrinkage

The Army reported recently that new shrink-resistant treatments have cut down shrinkage in wool blankets from 20 to 30 per cent. Untreated blankets lose from 30 to 40 per cent of their size after ten to 15 washings, according to the announcement, while blankets treated with one of the shrink-resistant processes will not lose more than ten per cent. The untreated blankets also lose much of their insulation value due to the matting of the fibers, the Army said.

One method of treatment is to chlorinate the blanket with a process similar to that used in dyeing piece goods, the other is to impregnate the wool with melamine resin in a dip tank, squeeze it through rollers, and then cure it into the fibers.

Maintenance, Engineering & Handling

Controlled Humidification In Textile Plants

By LEO WALTER

ALTHOUGH air conditioning, whereby air in spinning and weaving rooms is not only humidified, but also cleaned and heated or cooled is coming into wider use in textile mills all over the world, the problem of air treatment for processing can often be solved quite satisfactorily by using direct humidification combined with ventilation. It is also sometimes possible to utilize—under certain working conditions—existing unit heaters, and add water spray nozzle attachments for humidification purposes. In some cases, where an elaborate duct work, for example in weave rooms with low roofs of short span prohibits central air conditioning, it may be possible to install unit air conditioners having short runs of smaller diameter air ducts, as opposed to central air conditioning plants with elaborate large diameter air ducts, which might interfere with natural lighting or shafting.

Automatic Humidity Control Has Advantages

A great number of existing humidification systems, whether direct humidification or central air conditioning is applied, which has been put into service some years ago, still work on manual control in spite of less efficient effect, and wide variations of achieved relative humidity of the air, result from inefficient hand control. The progressive use of humidistats acting on automatic control valves in the supply pipelines for water, compressed air and steam has been caused by what can be termed the "unreliability of the human element."

Obviously, an automatic humidity controller or humidistat is superior to any attendance by plant personnel. An instrument, provided that it is maintained in good working order and is suitable for its job, is always on the spot, and works day in and day out in a reliable, steady way. This cannot always be said for the man in charge of humidity hand control, who depends on correct reading of humidity meters, and whose efficiency varies.

Where less satisfactory temperature and humidity control is achieved with existing out-dated control instruments, it is recommended that the automatic control system be brought up to date by installing controllers of the type about to be described.

The purpose of a humidification plant is primarily to produce exact controlled conditions. The reasons for inefficient automatic control of temperature and humidity can be manifold. Wrong types of controllers can be present, or right types, but wrongly installed and set, and badly maintained. Another possibility is that too little control has been applied, and the number of control instruments has been cut down to the bone. This happens sometimes in the face of keen competition, and leaves the less knowledgeable user in an awkward position. The above can be improved by reconstruction of instrumentation, and by putting in modern developed automatic control instruments, in the right number and correctly installed.

Plant Characteristics

There is another aspect of the problem, however, which should be investigated right from the beginning. Air conditioning, looked at from the control angle, is just a process to be kept in balance automatically. The two main factors or "process variables" are air temperature and relative humidity. The "processed" material is air, and the energy input into the process is either heating or cooling action. Considering that industrial process control in general, and in the various applications in textile industries in particular, has been tackled by means of highly developed control instruments, there seems no reason why responsive, accurate, gradual controllers should not be applied to produce closer control than ten to 20 years ago. The snag, however, may be somewhere else, namely, in unfavorable "process" characteristics of the air conditioning plant itself. In a "closed loop" control system the process itself (in our instance treatment of air) is part and parcel of the chain of actions and reactions which form the "control cycle" (Fig. 1).

The first thing to do then, if existing control is bad, is to make an investigation of the air conditioning or humidifying plant itself. Any air treatment system, whether simple heating and ventilating, or humidification only, or proper air conditioning combining the above, must be designed to maintain certain factors at maximum load, otherwise the plant would be undersized, and fitting or improving of automatic control would be useless, or at least inefficient. The best thing to do in investigations of this kind is to shut down all automatic control instruments, and to run conditioning or humidifying plant by hand, tabulating carefully all relevant data. Measuring instruments, such as outdoor thermometers and hygrometers, indoor thermometers and hygrographs, immersion thermometers into air ducts, etc., have to be installed, but can be borrowed if their permanent installation would not be warranted. Tests should be run of the temporarily hand controlled air conditioning plant under average, maximum and minimum conditions, mainly by picking out normal and extreme weather conditions. One conclusion can be taken with confidence: If the plant proves to be sufficiently big to meet maximum load, and is "elastic" enough to work well under minimum conditions with careful hand control, the plant is right, and any inefficiency in automatic control has to be traced in instrumentation. On the other hand, an inefficient plant cannot be properly controlled, and must be put right before any attempts are made to improve instrumentation. The target for a properly designed and working air conditioning plant is then to have such instruments fitted that instrument characteristics match plant characteristics.

Financial Considerations

There is, of course, a financial side to instrumentation. Many mills would like to have fully automatic control installed, but sometimes jib at the cost of efficient automatic control instruments. This has to be taken into account by the contracting supplier, and very often low-priced thermostat switches are installed, where a power-operated gradual operated temperature regulator with integral component (reset-type) would be much better. Potential users of air conditioning plants should be broad-minded enough to specify only the best suitable controller types, and to insist that fully automatic control is tendered for. It may be advisable for a potential user to issue a plant specification separately from a detailed specification of control instruments, preferably with the assistance of a consultant. This will produce tenders in two sections, instead of the all-in quotations, and it will make the decision in favor of high-class fully automatic control usually much easier. True, the full value of the latter is difficult to express in money but what is the use of an inefficiently controlled plant having heavy temperature and humidity fluctuations.

As far as existing humidification or air conditioning plants are concerned, a changeover from outdated controllers to more modern types will pay for itself in time by reducing spoilage of goods, and by producing more uniform results and often higher output. Another favorable factor should also be taken into consideration, namely, better comfort of workers in a steady shed atmosphere all the year round.

Direct Air Humidification

As explained previously, humidification of air is only part of the air treatment, and is not air conditioning in the proper sense of the term. For adding moisture to the air, co-ordinated control of any present heating and ventilating

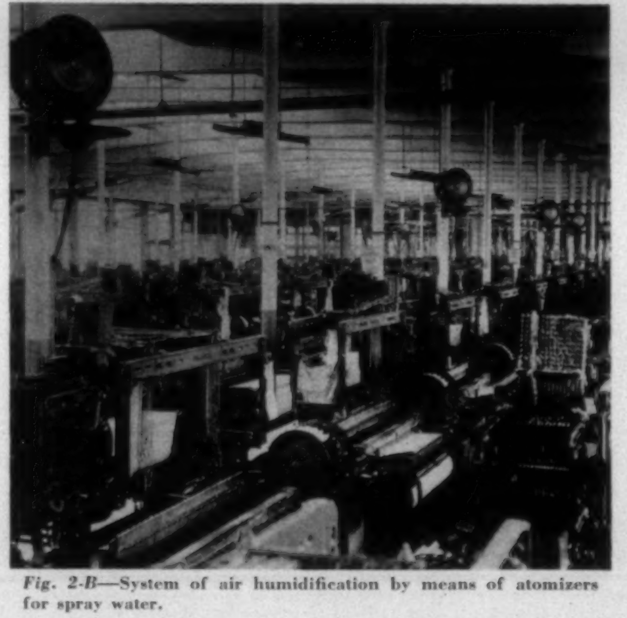

Fig. 2-B—**System of air humidification by means of atomizers for spray water.**

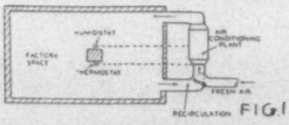

FIG. 1

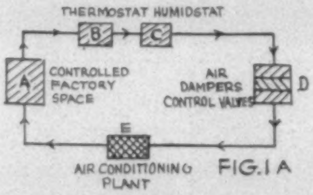

FIG. 1 A

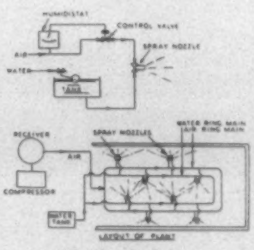

FIG. 2-A

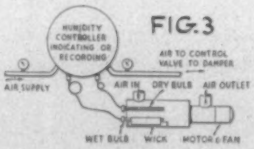
HUMIDITY CONTROLLER INDICATING OR RECORDING
AIR TO CONTROL VALVE TO DAMPER
AIR SUPPLY
AIR IN
DRY BULB
AIR OUTLET
WET BULB
WICK
MOTOR & FAN

FIG. 3

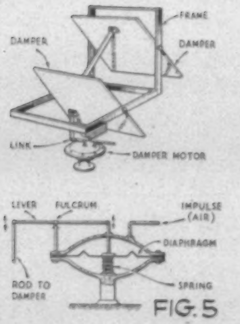

FIG. 5

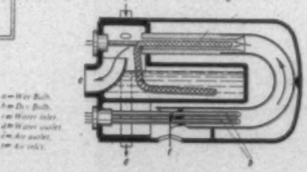

FIG. 4

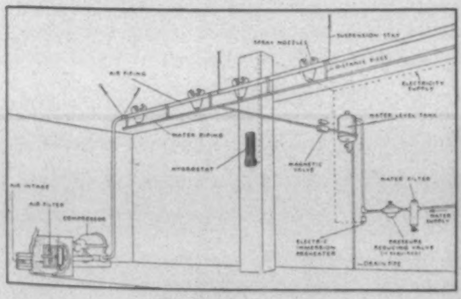

FIG. 6

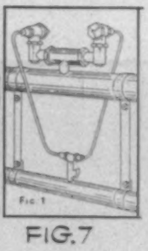

FIG. 7

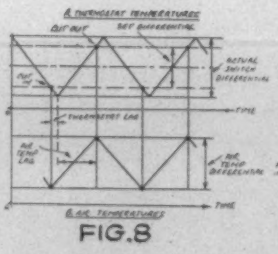

FIG. 8

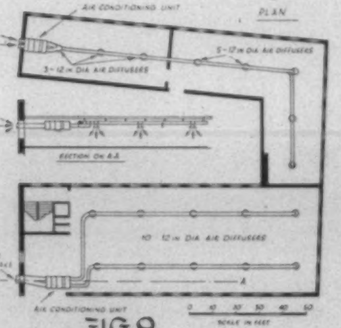

FIG. 9

Fig. 1—**Diagrammatic hook-up of central air conditioning plant and "control cycle." At** *Fig. 1-A*, **temperature and/or humidity becomes disturbed at "A." A control impulse develops in "B" and "C," actuates damper and valve "D." This varies output from conditioning plant "E" into space "A," thus closing the chain of action and reaction, called "closed loop."** *Fig. 2-A*, **direct humidification with water spray nozzles, using compressed air for atomization.** *Fig. 3*, **pneumatically operated wet-and-dry bulb humidity controller.** *Fig. 4*, **sectional diagram showing working principle of electrical humidity meter and transmitter.** *Fig. 5*, **air mixing dampers actuated from pneumatic lever motor.** *Fig. 6*, **hook-up of direct humidification system.** *Fig. 7*, **hook-up of water and air pipe and of spray nozzles.** *Fig. 8*, **characteristic curves for on/off thermostat (or humidistat), showing air temperature variations which must be allowed for.** *Fig. 9*, **humidification of textile area by means of air conditioning unit.**

system is necessary, otherwise adverse conditions would arise in the shed. Water sprays (see Fig. 2-A) are generally preferable to steam, because the latter cannot be used for producing a cooling effect, which chilled water sprays can provide. Spray chambers of air washers should have at least two banks of sprays, and should be easily controllable. Supervision requires wet and dry bulb thermometers in each room, but an additional outside instrument is recommended, preferably with remote indication inside. Control of humidifying plants should aim at maintaining, constantly and uniformly, the desired humidity conditions in spite of adverse general disturbances, but with due consideration of room temperature. For this reason modern humidifying plants for textile works should be, for preference, individual unit air humidifiers, either using atomized water sprays by means of quick-rotating discs (Fig. 2-B) or by using units combining a heater battery with water spray nozzle.

Humidity Control Instruments

When it is intended to improve an existing, otherwise efficient, but inadequately controlled humidification system, several types of automatic control instruments are available, and a few of these will be briefly described. The principle of humidity control is the well-known wet and dry bulb hygrometer, using the temperature difference between a wet and a dry thermometer bulb as a direct measure for relative air humidity. Fig. 3 illustrates diagrammatically this principle used for a pneumatically operated recorder-controller. For all pneumatically operated humidity controllers, a small air compressor plant is required, unless a compressed air piping system is already available, as previously described.

Some humidity regulators use specially prepared hygroscopic substances, which contract or expand with change of relative air humidity. Some modern types of humidity meters and controllers use a wet and a dry electrical resistance thermometer, over which elements a small motor-driven fan blows the air from the conditioned space. The electrical impulse thus created actuates gradually a motorized spray water valve, or air mixing dampers, etc. Fig. 4 shows the principle of a humidity transmitter of the electrical resistance type. Humidity indicators are available allowing direct readings of relative humidity in per cent R. H. In place of this indicator an automatic control mechanism can be used to actuate a motorized control valve in the water spray line.

Automatic Air Damper Control

As is well known, humidity is sometimes controlled in air conditioning plants by mixing the return air from the conditioned space with the fresh incoming and heated dry air. In many older central air conditioning plants the operation of these mixing dampers is left to hand control, but it seems often advisable to perform air damper adjustment automatically in accordance with actual humidity conditions in the shed. Pneumatically, hydraulically, or electrically damper motor units are now available, which can be actuated from a suitable humidistat or humidity controller of the wet and dry bulb type. This produces fully automatic humidity control, provided that the existing air dampers are suitable for automatic adjustment. It may sometimes be necessary to replace unbalanced single leaf air dampers with a louvre damper, but it should preferably be balanced (Fig. 5). Two-step mode of control, i.e., damper fully open if humidity should be increased, or fully closed if it should be reduced, can be often found in existing central air conditioning plants. This open and shut control may be satisfactory in some instances, but it may be inadequate in other places, where a continuous, gentle and metering damper movement is required to give closer humidity control. Fig. 6 illustrates automatic control of a modern direct humidification system, which applies water spray nozzles free from "drip," automatically controlled, with efficient automatization by means of compressed air.

Compressed air is carried in the upper pipe and water in the lower pipe (see Fig. 7). The water level is kept lower than the nozzles by means of a water level tank equipped with float valve, so that no drip can develop if air is throttled or shut off.

The humidification system works in zones, and each zone is controlled by a room humidistat, as shown. This humidistat operates a magnetic water control valve installed in the flow to nozzles. The hygrostatic system has a range of adjustment from 50 per cent relative humidity to 100 per cent. The humidity differential, i.e., the rate of fluctuations with two step (on/off) control mode is about only plus or minus two per cent relative humidity, which is normally close enough for average mill requirements. Fig. 8 shows diagrammatically how two-step mode works, which is essentially based on times of on/off of a control valve. It is recommended to use a water temperature of about room temperature, i.e., for placing a thermostatically controlled steam or hot water heating coil in the main water supply tank. Where higher accuracy of humidity control is required, pneumatic gradual control can be applied, as described in the following: Because a compressed air supply is already available, the use of pneumatic humidistats is easily applicable, and accuracies of plus-minus one per cent relative humidity might be obtainable under favorable working conditions.

When dealing with layouts of plants for humidification of air in cotton mills, the actual room temperatures and relative humidities of air in the sheds should be known over a period of several years. In some instances, dry bulb temperatures exceeding 85° F. against existing plant rules will be found. Contaminated air due to lack of mechanical exhaustion of air is also often encountered, and uncontrolled humidity conditions affect health of workers and mill output alike (Fig. 9).

It is not intended here to go into the intricacies of calculations of humidifications systems, using water sprays or steam, but it should be noted that both systems require a certain heat amount, because spray water must be raised to room temperature and for direct steam humidification, or using the more modern system of steam plus air humidification, heat must be supplied from the boiler.

Cooling load can be considerable during hot periods, and depends on outside temperature, heat losses from the building, and heat generated from machinery, lighting, and by the occupants. The principle cooling method for air is for tropical locations, what is called "refrigerated cooling." Modern humidification equipment should always be designed for maintaining very close dry-bulb (room temperature) and relative humidity conditions by means of efficient automatic temperature and humidity controllers.

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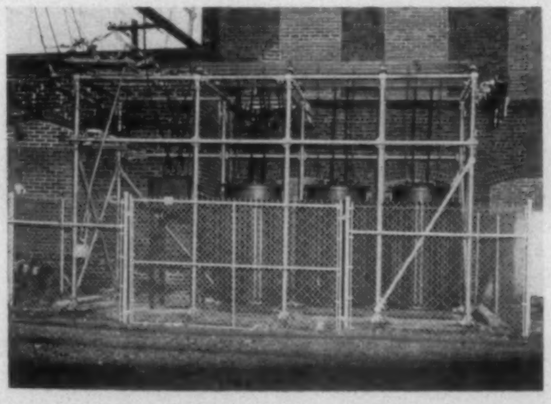

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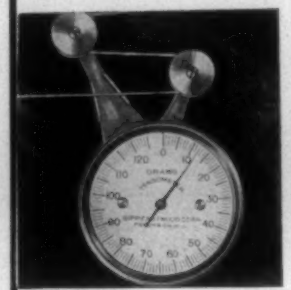

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PERSONAL NEWS

Maurice J. McCarthy joined Hardesty & Co. July 1 as director of sales. Hardesty produces stearic acid, red oil, glycerine and various fatty acids. Mr. McCarthy is a veteran in this particular line of chemicals, for the past 20 years having been associated with A. Gross & Co. as vice-president and treasurer. He joins Hardesty just as its expanded fatty acid plant in Philadelphia, Pa., gets into full production.

Four recent promotions at the Trion, Ga., division of Riegel Textile Corp., follow: John A. Sailey, overseer of the cloth room, named assistant superintendent of the gray mill, second shift, replacing W. A. Pearson, transferred to the Ware Shoals, S. C., division; Mark Cooper, overseer of the warp yarn mill, named overseer of the cloth room; William E. Asheley, second hand in the weave room, made overseer of the warp yarn mill; George W. Collett, formerly analyst and safetly administrator, named assistant personnel manager.

William F. Kennedy has been appointed representative in the Georgia-Tennessee area for Arnold, Hoffman & Co., Inc., Providence, R. I. Mr. Kennedy has been in charge of the Charlotte, N. C., sales service laboratory of Arnold, Hoffman & Co., and prior to that was with National Aniline Co. in its Charlotte laboratory for six years.

R. E. Sumner has been made general manager of the industrial chemicals division of American Cyanamid Co. and will make his headquarters in the company's main offices in New York City. He formerly was manager of the textile resin department of the company's Calco Chemical Division. . . . Other appointments include that of C. F. Bonnet from production manager to assistant general manager of the industrial chemicals division, and H. C. Little, named assistant to the president.

Harry H. Burton, for many years president of Lonsdale Co., has been elected a vice-president of Textron, Inc., Providence, R. I. He also was elected to the Textron board of directors and made a member of the executive committee.

Paul Groover has been elected executive vice-president of Pacific Mills, a position newly created by the board of directors. Mr. Groover joined Pacific Mills in 1942 and has been a vice-president of the cotton and rayon division since 1948. Prior to that, he was associated with Pepperell Mfg. Co. for 17 years. With his new position, Mr. Groover, who has been associated with the company's manufacturing operations at Lyman, S. C., will move to Boston where Pacific Mills has its executive headquarters. . . . Other organizational changes follow: Joe C. Cobb will become manager of cotton and rayon manufacturing; H. C. Estes will replace Mr. Cobb as general superintendent of the Rhodhiss (N. C.) Division; J. O. Lindsay will become manager of cotton and rayon finishing; C. B. Hayes, Jr., will become production manager of the cotton and rayon division.

Hunter R. Neisler, textile executive of Kings Mountain, N. C., recently was elected vice-chairman of the Cleveland County board of hospital trustees for 1952-53.

William E. Conlon, until recently sales manager for H & B American Machine Co., is now associated in the same capacity with Product Sales, Inc., 21 Vernon St., Whitman, Mass., general sales agents for Machinecraft, Inc., manufacturer of Climax ball bearing top rolls, and also sales agents for Industrial Plastics, Inc., manufacturer of Cleandraft nylon-bearing top rolls. Mr. Conlon succeeds Richard K. Butler, who has been appointed executive vice-president of Machinecraft, Inc.

C. N. Wallace, Jr., has been appointed manager of Stevens Mfg. Research, Greenville, S. C., a unit of J. P. Stevens & Co., Inc. Mr. Wallace succeeds A. E. Winslow who resigned to accept a position with Hartford (Conn.) Machine Screw Co. as general manager of its Southern division with offices at Greenville.

Alonzo F. Bonsal, vice-president of Joshua L. Baily & Co., Inc., has accepted appointment as representative of the Association of Cotton Textile Merchants of New York on the United States delegation to the forthcoming international cotton goods conference which will be held in London and Buxton, England, beginning Sept. 17. . . . Chairman of the U. S. delegation to the conference is Robert T. Stevens of J. P. Stevens & Co., Inc., representing the American Cotton Manufacturers Institute.

Mrs. Harriet Sargent Hildreth has been elected president of C. G. Sargent's Sons Corp. succeeding the late A. C. Sargent. F. Stanley Smith was elected treasurer and general manager and Raymond D. Tellier was elected assistant treasurer and clerk. The company this year is observing its 100th anniversary of manufacturing textile and special washing and drying machinery.

James D. Wise, president of Bigelow-Sanford Carpet Co., Inc., New York, has been elected vice-president of the general management division of the American Management Association. . . . Elected A.M.A. directors for three-year terms were John E. Bassill, president of American Enka Corp., and Grenville Holden, president of F. C. Huyck & Sons.

Paul R. Yopp of Atlanta, Ga., district sales manager for Babcock & Wilcox Co., has been nominated to serve as regional vice-president of the American Society of Mechanical Engineers in 1953. Since only one name is presented for each office, nomination is tantamount to election.

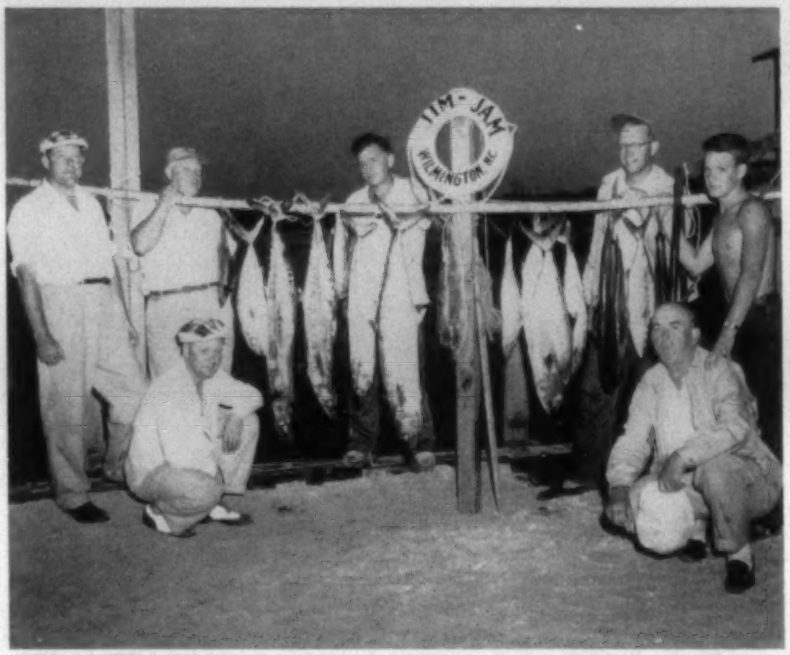
J. W. O'Neal, for a number of years general superintendent of all plants of Pacolet (S. C.) Mfg. Co., has tendered his resignation from the company. Mr. O'Neal joined Pacolet as superintendent of its plant at Gainesville, Ga.

George E. Auclair, formerly with Burlington Mills Corp., Greensboro, N. C., has been named chief chemist at the Butner, N. C., plant of Mount Hope Finishing Co. Mr. Auclair is a native of Fall River, Mass.

Oscar S. Neylans, assistant serectary and assistant treasurer for Bibb Mfg. Co., Macon, Ga., recently completed 30 years of continuous service with the organization.

H. B. Bergfeld, general superintendent of Bemis Bros. Bag Co., Bemiston, Ala., recently completed 50 years with the firm. Mr. Bergfeld began work with the company at the old Home Cotton Mill in St. Louis, Mo.

James C. Self, president of Greenwood (S. C.) Mills, was the 1952 recipient of the American Legion of South Carolina's plaque for distinguished service to his state. Presentation of the plaque was made June 30 at Myrtle Beach, S. C., during the convention of the



THIS TEXTILE INDUSTRY FISHING PARTY took off from Myrtle Beach following the Southern Textile Association convention and went after king mackerels, wahoos, amberjacks and dolphins at Wilmington, N. C. *Left to right:* E. G. McIver, Jr., of Erwin Mills, Durham, N. C.; John H. Foard of Ragan Ring Co., Newton, N. C.; R. V. McPhail *(kneeling)* of Watson & Desmond, Charlotte, N. C.; Linwood Roberts, boat captain; Ed Herring of Durham, N. C.; E. M. Holt of Erwin Mills; and the boat mate.

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  Twisting
Drip Pans
Dye Kettles and Vats (New)
Dry Cans
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Driers
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SPARTANBURG, SOUTH CAROLINA, U. S. A.

S. C. legion group. . . . Earlier in June Mr. Self was awarded the honorary degree of Doctor of Letters (in humanities), by the University of South Carolina.

William R. O'Shields, overseer of preparation at Judson Mills, Greenville, S. C., recently was elected chairman of the Western Carolina Safety Council succeeding Ralph C. Genoble of Brandon Mills, Greenville. Guy Clenn of Orr Mills, Anderson, S. C., was elected vice-chairman to succeed Mr. O'Shields and Mrs. Thelma F. Crawford of the personnel department of Brandon was re-elected secretary of the safety council.

Dan Worth has resigned as head of the physical testing laboratory at Mooresville (N. C.) Mills to become associated with the Chemstrand Corp. at Decatur, Ala. Mr. Worth had been associated with Mooresville Mills since November, 1949. . . . Seven recent appointments to the Chemstrand research and development department are: Drs. Madison L. Marshall, Andrew I. Smith, Edgar D. Smith and Robert L. Sublett, and Messrs. Edwin W. Lard, Leon Hecht, Jr., and Albert H. Bruner.

Malcolm R. Pitt retired July 1 as assistant general manager of the W. Harris Thurston division of Reeves Bros., Inc., after 27 years with the concern. Mr. Pitt will make his home in Essex, Conn.

John M. Neuffer and Hugh Cash have recently joined Steel Heddle Mfg. Co. and are working out of the Greenville, S. C., office. Because of their patricular textile backgrounds they will add to the service in field engineering. Mr. Neuffer *(left)*, a graduate of Clemson College in 1937, majored in textile engineering. He then joined Graniteville Mfg. Co. at its Warrenville, S. C., plant, and was there until entering the Army in 1941. After his discharge from service in 1946, he joined the U. S. Rubber Co. at its Winnsboro (S. C.) Mills and was then transferred to their New York fabric sales office, and was there until joining Steel Heddle Mfg. Co. . . . Mr. Cash *(right)* graduated from North Carolina State College School of Textiles, class of 1950. He was first employed by Burlington Mills at its Fayetteville, N. C., plant. He was later transferred to the Bul-Mil Steele plant, Rockingham, N. C., and then joined Steel Heddle Mfg. Co.

James A. Chapman, president of Inman (S. C.) Mills and Riverdale Mills, Enoree, S. C., has been named chairman of the recently-formed Council for Spartanburg County, a civic enterprise. . . . Miss Annette Duchein of the Spartan Mills staff, Spartanburg, S. C., was made a director of the council.

Donald A. Barnes, who has been associated with the Southern textile industry the past 18 years, has joined A. E. Staley Mfg. Co., Decatur, Ill., corn and soybean processor, as a technical sales representative. The Staley firm markets a complete line of textile starches and sizes. A 1943 graduate of Clemson College with a bachelor of science degree in textile chemistry and dyeing, Mr. Barnes has been a technical sales representative of Arnold, Hoffman & Co., Inc., the past five years. He will make his headquarters at Charlotte, N. C., but will operate under the supervision of the Staley corn division sales office at Atlanta, Ga.

Charles A. Knutton, Jr., assistant secretary of Standard Mill Supply Co., Pawtucket, R. I., and associated with the company for the past 15 years, has been appointed vice-president and manager of Standard Mill Supply, Inc., Charlotte, N. C., assuming his duties there Aug. 15. Mr. Knutton will take over the duties of A. Benson Davis who recently resigned from the same position.

P. F. Tinsley has been appointed director of district sales by Westvaco Chemical Division of Food Machinery & Chemical Corp. Mr. Tinsley has been with Westvaco since 1939. He was formerly district sales manager of the South. From 1942 to 1946 he served in the Chemical Corps of the U. S. Army. In 1946 he was appointed district sales manager with headquarters in Cincinnati. Since 1948 he has been Eastern district sales manager with headquarters in New York City.

John P. Swaggart, recently of Denver, Col., has joined the Bullard Clark Co. of Danielson, Conn., and Charlotte, N. C. Mr. Swaggart will be chief chemist of the Jacobs Rubber Division, devoting his time to development work principally on textile loom accessories for the E. H. Jacobs Southern Division of Charlotte, N. C., and the E. H. Jacobs Northern Division of Danielson, Conn. A graduate of the University of Denver, Mr. Swaggart was previously associated with the Gates Rubber Co. for 25 years. He and his family will reside in Danielson, Conn.

Pittsburgh Coke & Chemical Co. recently announced four appointments to the staff of its recently-organized fine chemicals division: Joseph S. Milazzo was named assistant superintendent in charge of dyestuff production; Heinz Gruen was appointed as-

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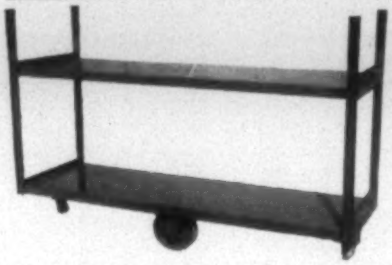
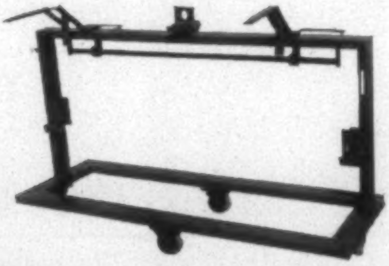


TRIDENT TRUCK

Double tier truck made of all steel, welded construction, 10" wheels in center, 3" swivel casters at each end. Made to any specifications. Used for storing cheese boards; haul cheese boards from spooler to warper; transport cheese boards to twister room. Eliminates crating or uncrating cheese when yarn is needed.

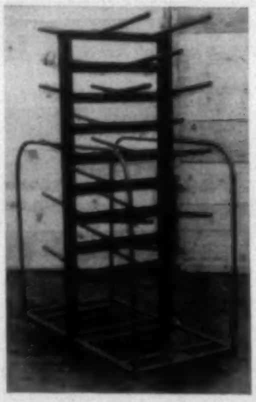


SPECIAL WARP TRUCK

All steel, welded warp truck for textile plants using overhead rails in weave rooms and where aisles are too narrow for warp trucks. Warp is drawn right on this truck also. Top section of this truck, with the warp, lifts off with the overhead rail and then can be moved to any loom in the weave room.

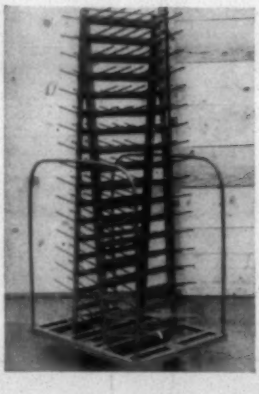
SPOOLER DUMP TRUCK

Used to dump yarn into spooler box, or empty quills into Abbott winder elevator. Eliminates lifting of heavy boxes when pouring yarn into spooler boxes. A time-saver when used to catch empty quills from quill cleaner. With one dump the elevator can be filled on winder. Made to fit any spooler or winder elevator. Heavy steel welded.



CHEESE TRUCK

For creeling twisters and for storage. No cheese boards used with this type truck. Can be pushed down twister aisles which puts cheeses at operator's finger-tips at all times. Prevents damage to yarn, eliminates digging into box for yarn. All steel welded construction.



PIN TRUCK

"A" Frame type has 216 pins; all steel welded construction. Can be constructed with any number of pins. Used in doffing twister frames operating on rayon, nylon, fiberglass yarns. An excellent storage truck; no lifting of pin boards; no damage to yarn.

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SAM E. MABRY	Spartanburg, S. C.
WM. R. FOX	P. O. Box 380, Providence. R. I.
GREENVILLE TEXTILE SUPPLY CO.	Greenville, S. C.

sistant supervisor of fine chemical process development and will supervise laboratory work of the dyestuff group; Henry H. Richmond will be assistant supervisor of fine chemical research; Albert E. Medas was appointed chief colorist, to supervise dye standardization.

Lee Pickens *(left)* has joined the firm of John Stickley, yarn and wool top selling agency at Charlotte, N. C., as sales representative. Mr. Pickens is a textile graduate of Clemson College, served in the Air Corps during World War II and represented Celanese Corp. of America out of its Charlotte office following military service. For the past year he has been pursuing post-graduate studies. The Stickley organization is Southern sales representative for Nichols & Co. of Boston, Mass., Spun Fibers, Inc., of Lenoir, N. C., Profile Cotton Mills of Jacksonville, Ala., California Cotton Mills of Uniontown, Ala., and is exclusive selling agent for the synthetic yarn division of Peerless Woolen Mills of Rossville, Ga.

James M. Myers, sales representative in Salisbury, N. C., for Standard Chemical Products, Inc., was married May 24 to Miss Melmoth Young. A reception was held at the Salisbury Country Club and the newlyweds spent their honeymoon at Myrtle Beach, S. C.

Benjamin P. Anderson and Robert Quackenbush, both of the New York area, are recent additions to the quality control staff of Wellington Sears Co. Mr. Anderson, who will concentrate his efforts for the present in the company's synthetic operations, was associated with Dan River Mills for approximately 18 years and has served briefly with the New York Quartermaster Procurement Agency. Mr. Quackenbush, who will be under the supervision of John Carey, manager of the company's converted goods quality control department, was recently with Collins & Aikman in the men's wear fabric division. Prior to that he was head of the specialty fabrics division of William Whitman Co. Both men will make their headquarters at Wellington Sears Co.'s New York office at 65 Worth Street. . . . Willfred W. Lufkin, Jr., executive vice-president of Wellington Sears, has been elected a director of the company. Before joining the firm in 1950 he was vice-president in charge of sales for Dan River Mills.

Timothy R. Devitt has been appointed to the technical sales and service staff of Hilton-Davis Sales Co., Boston, Mass., and will direct activities of the new textile service laboratory now nearing completion. Before joining Hilton-Davis Mr. Devitt was associated with Althouse Chemical Co., Arkwright Finishing Co., Lincoln Bleachery & Dye Works and Collins & Aikman Corp. . . . W. Hersey Howard has joined the technical sales staff of Hilton-Davis Chemical Co., a division of Sterling Drug, Inc., Cincinnati, Ohio. He will handle sales of Hilton-Davis dyestuffs to the textile industry in the Mid-West and in addition will co-ordinate technical sales activities of Hilton-Davis Sales Co., Boston, and Blackman-Uhler, Spartanburg, S. C., Southern sales representative of the firm. Mr. Howard was associated with the Ciba Co. before joining Hilton-Davis.

John F. McGreevy has joined the central engineering department of American Cyanamid Co. where he has been assigned to a study of the program for X-51, the company's new acrylic fiber. He will be assistant to the chief engineer. Mr. McGreevy joined Cyanamid in 1928 and was with the Calco Chemical Division in a senior engineering capacity prior to his recent appointment.

Arthur E. Kallinich, a vice-president of Veeder-Root, Inc., Hartford, Conn., recently completed 50 years with the firm. Special honors were conferred on Mr. Kallinich at a dinner party attended by employees with 40 years or more of service, and the management group. Mr. Kallinich joined the Root Co. in Bristol, Conn., May 6, 1912, before this concern merged with the Veeder Mfg. Co. in Hartford to form the present Veeder-Root, Inc. He came

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GREENSBORO LOOM REED CO.

up from the mailing department, through the sales department, to a vice-presidency a few years ago.

Nelson S. Knaggs, vice-president in charge of sales of the Hilton-Davis Chemical Co., Cincinnati, Ohio, has been elected chairman of the finance committee of the Cincinnati Museum of Natural History. Mr. Knaggs, who is a member of the museum's board of directors, is also a renowned explorer.

C. R. Hall has been named manager of the Southern sales office of American Enka Corp. at Greensboro, N. C., succeeding R. J. Mebane who retired July 1 after having been in charge of the office since 1930.

Douglas C. Newman, general director of sales for the organic chemicals department of E. I. du Pont de Nemours & Co., Wilmington, Del., and formerly of Charlotte, N. C., was married June 6 to Miss Rhona Petrie Stewart of Philadelphia, Pa.

Harris H. Bucklin, Jr., has succeeded R. M. Mauldin as Charlotte, N. C., sales representative for Universal Winding Co., Providence, R. I. Mr. Mauldin retired June 30 because of a prolonged illness.

Z. B. Lane, Jr., formerly manager of the knitting division of United Rayon Mills at Old Fort, N. C., is now manager of another United Merchants & Manufacturers, Inc., unit—the new Clarkesville (Ga.) Mill, which is a rayon weaving plant.

James W. Lederer *(left)* has been placed in charge of the new Southern office at Chattanooga, Tenn., recently opened by Richmond Oil, Soap & Chemical Co., Inc., Philadelphia, Pa. Mr. Lederer will service textile mills in his territory of Tennessee, Kentucky, Mississippi, Georgia and Alabama. . . . Henry Ruben will concentrate his efforts in North and South Carolina; George C. Kantner has been promoted to chief chemist of the firm.

Charles Waters, formerly plant superintendent for Potomac Dyeing & Finishing Co., at Hagerstown, Md., has joined Soluol Chemical Co., Inc., of Natick, R. I., as technical services and sales representative in Virginia, North and South Carolina. At one time during his career Mr. Waters was assistant superintendent of woven and knit fabrics dyeing and finishing for Celanese Corp. of America at Hopewell, Va.

Change this to BOTTOM
out altogether
Make this a young Gibbs
Don't like this
What's this?
MOVE THIS TO TOP
P.S. Let's see an entirely new layout!!
TEXTILES MILLS Co INC ADVERTISING DEPT.
Glock

"I thought I really had something when he said 'Great, great!'—but then came the 'buts' . . ."

George B. Blomquist, Jr., of the Charlotte, N. C., office of Saco-Lowell Shops, was married June 28 to Miss Natalie Neal of Raleigh, N. C.

W. H. Kordt, for the past several years associated with Chicopee Mfg. Co., New Brunswick, N. J., has joined Fulton Bag & Cotton Mills, Atlanta, Ga., as director of engineering.

Warren R. Williams, president and general manager of Father George Mills, Inc., has been installed as 1952-53 president of the Sanford (N. C.) Rotary Club. . . . Roy A. Palmer of Duke Power Co. has been installed as president of the Charlotte (N. C.) Rotary Club.

Joseph E. Johnson, superintendent and assistant manager of Grier Mills at North Wilkesboro, N. C., and Gordon Spinning Co. at Roaring River, N. C., has retired

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ENGINEERED TO FIT YOUR NEEDS—When ordering, specify rail width, thickness of back flange, and gage and number of rings in each rail on one side only, as 24-22-22-22-24.

EASY TO INSTALL—Simply drill and tap ring rail. We supply the shields and bar drilled to your gage and ring count, together with proper support hangers and all screws and washers.

Features that defy comparison

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- No attention after installation

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Walter Coleman, Box 782, Salisbury, N. C.
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Ed F. Brown, 417 Dale Ave., Knoxville, Tenn.
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Matthews Equipment Co., 93A Broadway, Providence, R. I.

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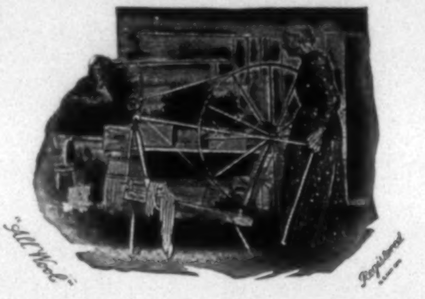

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LEATHER & BELTING COMPANY

GREENSBORO, NORTH CAROLINA

from active work and moved his residence to Florida. He has been succeeded as superintendent and assistant manager of the two mills by A. A. Oliver.

OBITUARIES

Roddy A. Field, 46, chief textile engineer at Stevens Mfg. Research, Greenville, S. C., a unit of J. P. Stevens & Co., Inc., died suddenly June 20. Mr. Field was a native of Newnan, Ga., and interment was made in that city.

Kemp P. Lewis, 71, chairman of the board of Erwin Mills, Inc., Durham, N. C., died June 29. He graduated from the University of North Carolina in 1900 and joined Erwin Mills in October of that same year. He began his career as secretary to W. A. Erwin, who founded and headed the company throughout his lifetime. He became secretary and treasurer of Erwin Mills in 1927 and was made president in 1932. He became chairman of the board in 1949, a post he held until the time of his death. Surviving are four daughters, a brother and a sister.

W. Lewis Moore, 42, superintendent of the weaving department at Gerrish Milliken Mills, Pendleton, S. C., died June 22. He is survived by his wife, three sons, four brothers and three sisters.

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

KERNERSVILLE, N. C.—Purchase of the Southern Silk Mill, Inc., of Kernersville, by Burlington Mills Corp. was announced recently by J. C. Cowan, Jr., president of Burlington Mills. Burlington acquired all of the stock of the Southern Silk Corp., of which W. B. West of Greensboro is president and C. A. Stone of Kernersville, secretary. The Southern Silk plant has been closed for some months and Mr. Cowan said, in connection with acquisition of the property, that Burlington Mills has no plans at this time for activating the plant. "We are delighted to acquire the modern building and machinery comprising the Kernersville property," Mr. Cowan said, "and we will make a study there to see how this unit can be integrated into our company." While Burlington Mills has no immeliate plans for the property, Mr. Cowan pointed out that the plant, which is near other Burlington operations, comprises an advantageous location and one that can be fitted into future plans of the textile concern that maintains its executive offices in Greensboro. Southern Silk is a weaving plant of approximately 200 looms and last operated on man-made fibers. Burlington Mills already operates one plant in Kernresville, the Vance plant, a half-hose knitting operation.

HICKORY, N. C. — Joan Fabrics Corp., New York, recently acquired plant facilities here for the development of a flat upholstery operation which will be complimentary to Joan's present line of pile fabrics.

ATLANTA, GA. — Fulton Bag & Cotton Mills has awarded a contract for the construction of a new addition to its finishing plant and bleachery, according to an announcement by Norman E. Elsas, chairman of the board. The new building will occupy an area immediately south of the existing mill and will be connected to the present buildings by a bridge across Tennelle Street. It will be a three-story building of reinforced concrete design, totaling approximately 75,000 square feet floor area. The operating areas will be lighted with fluorescent lighting. It is planned to incorporate means for cooling the roof with water to reduce temperatures within the building. The new building will reduce congested operating areas within the existing bleachery and by installing latest design equipment of increased production capacities, and also by re-locating some of the existing equipment to the new structure. Initially, it is expected that present personnel will operate the new equipment. The new structure will permit some room for future expansion, in keeping with Fulton's steadily growing diversification of products. To make room for the new building, it was necessary to re-locate a number of multiple family residences on the company's property. This was done with a minimum of inconvenience to the tenants, after which improvements were made to the houses. Plans and specifications for the new building were prepared by A. K. Adams & Co., Inc., of Atlanta, engineers and contractors, with completion scheduled for the latter part of 1952, dependent on government restrictions and availability of materials. Fulton Bag at present employs approximately 2,000 people in its Atlanta plant, which includes cotton mills, bleachery and bag mill. Other plants are located in New Orleans, Dallas, St. Louis, Kansas City, Denver, Los Angeles and Minneapolis.

RANLO, N. C. — Rex Mills, Inc., will begin construction soon on a new laboratory. The one-story structure, to be 32 by 55 feet, will be of brick and steel construction and will contain a laboratory, apparatus room and supervisor's and superintendent's offices. Plans were prepared by Lockwood-Greene Engineers, Inc., Spartanburg, S. C.

CARROLLTON, GA. — Mandeville Mills, Inc., currently is celebrating the 50th anniversary of its organization. The mills held

TERRYBLY ATTRACTIVE are these two young women who posed for the above publicity shot in connection with launching of the new *S. S. United States.* The accompanying press release said something about Martex terry bath sheets being furnished to pool swimmers and deluxe stateroom passengers on the superliner, but said nothing about anything else being in the pool but water or in the staterooms but furniture.

an open house June 25 and on July 2 entertained at a barbecue dinner for stockholders, customers, civic leaders, employees and others. The company now employs about 625 persons with an annual payroll of $1,200,000.

TIFTON, GA.—The American Woolen Co. plans to establish a woolen plant here in a recently-purchased 63,000 square foot building. A considerable sum will be spent on altering the building and in placing machinery for operations. This work is expected to require about six months after which a training program for employees will be started. American Woolen Co. has headquarters in New York and operates 22 manufacturing plants in New England, one in Louisville, Ky., and another in Raleigh, N. C.

STATESVILLE, N. C.—The Phoenix Division of Beaunit Mills is now ready to resume full operations. Weaving activities have been greatly increased by installation of new looms and addition of a new dyeing and finishing section. Knitting activities at the mill were discontinued last year and transferred to another Beaunit unit.

MERIDIAN, MISS. — Officials of Textron, Inc., and of the City of Meridian recently signed a contract canceling plans for construction of a $6,500,000 municipally-owned textile plant which would have been leased to Textron.

SPARTANBURG, S. C.—A large and modern warehouse has been completed at Beaumont Mills, a division of Spartan Mills. Constructed at an estimated cost of $125,000, the new facility will be used for cloth or cotton storage.

FAIRMONT, S. C.—Fairmont Mills, Inc., out of production for eight weeks, resumed full operations June 30. The mill was closed "due to the downward trend in the industry in general." The mill was reopened on a full three-shift basis. Fairmont employs about 275 and has a weekly payroll of about $14,000.

GREENSBORO, N. C.—Greensboro Mfg. Co. has announced plans for construction of a $1,000,000 textile manufacturing plant at Warehouse Street and Bessemer Avenue. The building will have a frontage of 288 feet and a depth of 540 feet. The project is the largest building plan started in the city since World War II.

SPRAY, N. C. — Initial construction was started July 7 on the new $29,624,600 plant here of Carbide & Carbon Chemical Co., a subsidiary of Union Carbide & Chemical Corp. The National Production Authority has granted the allotment of controlled material needed for the construction. The new plant is being built on the banks of the Dan River, halfway between Draper and Spray.

WOODRUFF, S. C.—Installation of 100 X-P 50-inch Draper looms was completed recently at the Woodruff plant of Mills Mill, a subsidiary of Reeves Bros., Inc., at an estimated cost of $150,000. Installation of new winders and Abbott quillers is currently under way at a cost of about $65,000.

PROVIDENCE, R. I.—Malcolm G. Chace, Jr., president of Berkshire Fine Spinning Associates, Inc., stated recently that his company might be forced to move some of its operations to the South. Mr. Chace said his company had found it impossible to meet Southern competition—and that the main difference was labor costs. Berkshire operates ten mills in New England and normally employs about 8,000.

DILLON, S. C.—An order approving an amended Chapter X plan of reorganization for Carolina Mills, Inc., manufacturer of combed and carded yarns, was filed last month in U. S. District Court at Charleston, S. C. The order followed a hearing in Columbia, S. C., on the plan submitted by David H. Brown, sole stockholder in the corporation.

LAURINBURG, N. C.—A new 100 by 125 foot addition currently under construction at Scotland Mills, Inc., will be used for processing of rugs manufactured by the company. Formerly the rugs were shipped to Dalton, Ga., for processing.

GREAT FALLS, S. C.—Plans have been announced for construction of a new dye plant at Republic Cotton Mills, a division of J. P. Stevens & Co., Inc., at a cost of over $1,000,000. The plant will contain 27,000 square feet of floor space.

JOANNA, S. C. — Individual motors for driving spinning frames have been installed in Spinning Room No. 1 at Joanna Cotton Mills Co., replacing the belts which had been used since 1924.

EASLEY, S. C.—New Gwaltney spinning frames are being installed at Alice Mfg. Co., Easley, and at Greenwood Mills, Ninety-Six, S. C. These two plants are said to be the first in the South to install the new frames, which were developed by Saco-Lowell Shops.

WHITMIRE, S. C. — Personnel of the Whitmire plant of Aragon Baldwin Mills, a division of J. P. Stevens & Co., Inc., were entertained at a barbecue dinner last month in celebration of the plant's safety record. Plant personnel, between Sept. 25, 1950, and Oct. 29, 1951, worked over three million man-hours without a lost-time accident. Since that date they have worked another 1,750,000 man-hours without loss of time. High point of the celebration was presentation of a plaque to Supt. J. J. Frier by E. L. Parmenter of the Liberty Mutual Insurance Co.

For the Textile Industry's Use

EQUIPMENT — SUPPLIES — SERVICES — LITERATURE

Dixon Weight Measurer

To prevent uneven weighting from spoiling quality yarn, Dixon Lubricating Saddle Co., Bristol, R. I., recommends its weight measurer. The firm states that both spring-weighted and lever-weighted top rolls can be accurately checked. "This method of measuring weights has proved both more practical and more accurate than the mathematical method usually employed. It even accounts for weight lost by the frictional contact of weighting components, such as levers, stirrups, springs, etc., which cannot be figured mathematically. Made entirely of aluminum, once it is assembled it can be carried with ease anywhere in your spinning room, and can be set on a frame in no more than a minute's time. In another minute, upon adjustment of the thumb nut on top the instrument scale shows (within four ounces) the actual weight delivered to any top roll."

Du Pont Bulletin

Properties and applications of Du Pont's 35 per cent hydrogen peroxide, Albone, are listed in a new eight-page technical bulletin prepared by the firm's electrochemicals department. The bulletin lists chemical and physical properties, describes control of reactions and decomposition, methods of analysis, and gives packaging information. It also lists construction materials for alkaline and acid peroxide solutions and includes a section on uses covering bleaching of the principal textile fibers and other items. There is a list at the end of additional technical bulletins on hydrogen peroxide that the company has published. Copies of any of these bulletins can be obtained from the Du Pont electrochemicals department in Wilmington, Del., or any of its district sales offices.

Universal Bulletin

Universal Winding Co., Providence, R. I., recently made available to the industry its Bulletin 501 describing the new Unirail uptwister. The Unirail uptwister, the bulletin states, provides higher yarn quality and better packages at faster speeds and lower costs. Outstanding advantages characteristic of the new uptwister, as listed by the bulletin, include (1) improved yarn quality,

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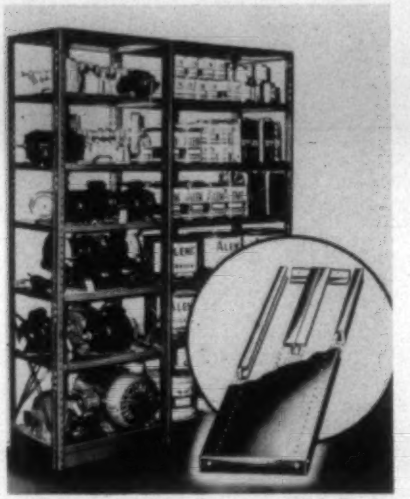
(2) increased production at lower costs, (3) better package formation, (4) lower power cost, (5) less wear on spindle swing and other parts, (6) less maintenance, and (7) pre-erection and factory run-in simplifying installation.

Iron-Grip Shelving



Equipto, division of Aurora (Ill.) Equipment Co., announces a new line of Iron-Grip shelving. The shelves have been designed to hold up to 2,000 pounds on each individual shelf.

Specially re-enforced sides and center of shelves are equipped with one-inch by one-inch high carbon angle irons, one-eighth of an inch thick. Front and rear have U-shaped re-enforcing channels which are even stronger than angles. This new super-strength shelving is a part of Equipto's large and complete Iron-Grip shelving line which insures ease of set up.

A special Iron-Grip stud, exclusive with Equipto, saves 60 per cent of assembly time The stud slips into a hole in the shelf and then into a keyhole in the upright. The shelf is then pressed down and assembly is complete. A slope in the stud combines with the slope in the keyhole to form the tightest and firmest of grips. No nuts, bolts, or tools are needed for speedy shelf adjustment. All shelving in the Equipto Iron-Grip line is instantly adjustable on 1½-inch centers. All openings are 100 per cent adjustable from front of units. Dividers, drawers, backs and side panels are available in all sizes.

Textile Measuring Device

Central Scientific Co., Chicago, Ill., announces the discovery of an application in the textile industry for one of its established products, a measuring apparatus for heat conductivity originally designed for other industrial and laboratory uses.

The insulating quality of fabrics also can be tested accurately and quickly by the instrument, which until recently was thought to be capable of measuring the thermal conductivity of only such materials as blotting paper, wallboard, glass and all types of insulating materials, John T. Gossett, president, said. Textile manufacturers, he explained, are thus enabled to compare the warmth-retention qualities of various fabrics and to maintain specific standards before distribution to the garment industries.

According to Mr. Gossett, a layer of the material being tested is brought in contact with the measuring device which is filled with boiling water and kept at a constant temperature by an immersion heater. The material is then placed on a receiving block of metal of known heat capacity. The temperature changes in the receiver, as affected by the heat being conducted through the material, are measured by means of a thermocouple and the rate at which the receiver increases its temperature determines the insulating value of the fabric.

Well-insulated materials will cause the receiver block to warm up more slowly than those which are poorly insulated, Mr. Gossett explained. He also pointed out that the device is useful for measuring the lack of thermal conductivity, providing textile manufacturers with a positive means of determining the most comfortable fabrics for Summer as well as Winter. The instrument, he said, is simple to operate and non-destructive to the material being tested.

Aquex Finishing Process

A new finishing process that renders 100 per cent spun viscose rayon fabrics unconditionally washable has been developed by the Aquex Development & Sales Corp., Whippany, N. J. Readily prepared, and applied with conventional finishing equipment, the finish is a permanent one which will last the life of the fabric, the company claims.

The process employs Aquex BNWC—one of the finishing resins recently developed by the Aquex Co. Actual mill production runs, an official states, have shown that fabrics treated with the new process have the advantage of low residual shrinkage when washed at the boil and no progressive shrinkage even when washed many times at the boil.

The same tests demonstrate that fabrics treated with this process are resistant to the damaging effects of chlorine, acid and alkali washes. Such fabrics can be bleached in the home or in commercial laundries without any danger of yellowing or any loss of fabric tensile strength. Another advantage is an improvement in the wet strength of the fabric, which means it can resist the destructive effects of washing far better than anything known heretofore.

With all its outstanding advantages, the process is said to be very economical in chemical cost and should find a place in the finishing of rayon fabrics where the primary requisite is complete, unconditional washability. Further technical information and arrangements for field demonstrations are available by writing the Aquex Development and Sales Corp., Dept. C., Whippany, N. J.

New Chemical Firm

Dixie Size & Chemical Co., Columbus, Ga., was organized recently by Cason J. Callaway, Jr., W. Simeon Fair and Walter P. Hope. Mr. Callaway has been associated in an executive capacity with Callaway Mills Co., LaGrange, Ga.; Mr. Fair as chemist for Frank G. North, Inc., Marietta, Ga., and Mr. Hope as Georgia sales representative for the A. E. Staley Mfg. Co.

Additional I.C.S. Texts

Three new instruction texts on textile dyeing have been added to International Correspondence Schools courses in textile engineering, manufacturing, and finishing and dyeing, John C. Villaume, acting dean of the Scranton, Pa., institution has announced. The first two lesson texts were written by Girard R. Adams, B.S., sales consultant of General Dyestuff Corp. and the third was prepared by John P. Ploubides, B.T.C., superintendent of dyeing and finishing, and a member of the American Association of Textile Chemists and Colorists.

The texts deal with dyeing of all types of fiber, including the latest techniques in handling synthetics. The dyeing of the new blended fabrics, such as Dacron-acetate, wool-nylon and others is covered. The latest continuous dyeing techniques, including hot-oil dyeing, are explained in the texts. They are available both to individual students and to companies using the I.C.S. Selective Plan, under which the employer selects only those subjects which are needed to achieve a specific objective for certain picked personnel.

Consolidate Offices

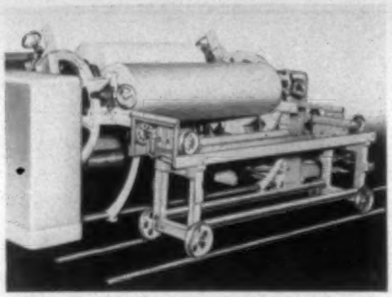
Universal Winding Co. of Providence, R. I., has recently re-located and consolidated its Charlotte, N. C., winding and twisting divisions' offices in new and larger quarters at 1005 West Morehead Street, to provide better customer service. The Charlotte office is staffed by three sales agents: Frank P. Barrie, Dudley M. Dunlop, Harris H. Bucklin, Jr., and four service engineers.

Division Changes Name

At a recent meeting of the sales and office personnel of the Somerville-Seybold division of Henley Paper Co., Atlanta, Ga., C. F. Somerville, Jr., vice-president and divisional manager, announced that the name of the firm had been changed to Henley Paper Co. of Georgia, Inc. In his announcement Mr. Somerville reviewed the progress of the firm since it was first organized by himself and Harvey Seybold in August, 1947, continuing through the Henley purchase of the Seybold interests in January, 1950, to the present date.

Mr. Somerville stated that during this short five year period the company's business has grown so fast that it was required to expand its warehouse facilities several times in its old location at 700 Murphy Ave., Atlanta, and that as of June 1 it was completely moved to its new warehouse location at 1100 Murphy Ave., S. W., where greatly enlarged facilities will enable it to better service the trade. The new warehouse, having upwards of 60,000 square feet, has its own railroad siding for unloading five cars at a time; two elevators, as well as other conveying equipment, a large shipping dock and comfortable private and general offices. Mr. Somerville stated further that in changing the name there would be no change in administrative policies or personnel. It was done more to identify the Atlanta division with other divisions of the Henley organization in its joint selling and promotional activities. Mr. Somerville introduced A. B. Henley, president of Henley Paper Co., which was established in High Point, N. C., in 1906 and now has divisions in Charlotte, Asheville and Gastonia, N. C., as well as Atlanta and High Point completely covering the growing Southeastern United States industrial markets. Mr. Henley spoke briefly.

Gessner Turret Winder



The David Gessner Co. announces the development of a new automatic turret winder for use with the Gessner full decating machine. Several features of this new turret winder insure an increased production in full decating, the firm states.

The hoist to lift the perforated rolls wound with cloth and apron has been eliminated. The rolls are transferred from the winder to the carriage which carries them to the decating kettle by means of a revolving turret. This turret is push-button controlled and is locked securely into place at the end of each cycle. Automatic guiding of the apron does away with any loss of time for straightening. This feature keeps the apron free from wrinkles. Tension on the apron is easily maintained by the use of a friction roll.

The rolls of cloth and apron are cooled in the winder rather than in a cooling frame which thereby saves the floor space which a cooling frame would otherwise require. Designed to give a production of ten to 16 pieces per hour with one operator, this new turret winder, coupled with the Gessner automatic controls on the vacuum kettle itself, comprise a new and efficient team in the process of full decating.

New Treated Leather Aprons For Long Draft Spinning

Russell A. Singleton & Sons of Blanco, Texas, announces its latest, laboratory-tested product—a new long draft spinning apron with the fine drafting qualities of leather, plus the long life of synthetic resins. The natural strength of leather has been reinforced with resins, giving a resistance to compression abrasion wear three to four times as great as that of ordinary leather.

In Taber abrasor tests of 3,000 cycles, the new treated leather Singleton aprons were reduced only .010 in thickness; whereas ordinary leather aprons, untreated, were reduced .040 in thickness. The new Singleton aprons, now have four times the life and resistance to wear of ordinary leather aprons. Treatment has not reduced the spinning qualities of the leather, but has endowed it with much longer life and greater uniformity.

According to George W. Singleton, Southern ales manager of the company, these are the advantages of Singleton's new treated leather spinning aprons: (1) Combine the spinning qualities of leather and the long life of synthetic resins, at the same time overcoming any disadvantages of either. (2) Through an exclusive method (patent pending) Singleton can maintain closer tolerance in thickness than was ever before possible in a long draft apron, giving still better control over the movement of fibers during the drafting process. (3) The treated leather aprons now have as much as four times the resistance to abrasive wear as ordinary leather aprons. This enables efficient use of the aprons over a longer period of time. It makes possible the production of yarns that are more uniform and more even than can be produced on any other apron, either ordinary leather or synthetic. (4) The new aprons operate on any type of spinning, including super draft dual system, Roth, Shaw SG-1, Shaw modified, and others. The company offers proof from tests in selected mills using these several systems, of performance and greater evenness of yarn produced. (5) When used for replacement or repair, the new Singleton aprons last through until the regular clean-up period, and even then do not have to be cut off. Mills using these finer treated leather aprons will not need to "replace the replacement aprons."

In announcing the availability of this new treated leather apron, the Singleton company offers to make tests on the mills' own spinning frames.

Twitchell 7421 Worsted Oil

Emery Industries, Inc., Cincinnati, Ohio, announces Twitchell 7421 worsted oil, a new high-quality worsted oil with anti-static properties. Extensive, continuous mill tests have established its utility as a fiber lubricant, the company states. Additional important features of 7421 worsted oil are:

Static control: Twitchell 7421 provides the static control required by high-speed processing in most instances. This is true for integrated worsted operations where this oil is applied throughout, or where tops are processed with at least 1½ per cent oil.

Emulsion fluidity: Water emulsions containing as high as one part of oil to one part of water are still fluid enough to be used in fine application systems. This permits the use of high oil concentrations without using excess water or creating stickiness or gumming.

Emulsion stability: The exceptional emulsion stability of this product is evidenced by the absence of oil separation in water emulsions after standing for several weeks. This is true of emulsions ranging from one part oil to nine parts water up to as high as one part oil to one part water. In addition, the penetration and spreading properties of these emulsions are excellent.

Resistance to yellowing and odor development: Of considerable importance to high quality worsteds is the outstanding ability of Twitchell Oil 7421 to resist yellowing, staining and the development of rancidity and other odors upon aging. This is very essential to dry finished fabrics where any staining, yellowing, or dulling of colors is reflected by decreased sales appeal.

Excellent scourability: In normal plant scouring, even after prolonged aging, an average residual oil content of 0.3 per cent is easily obtained. The excellent scourability compares with that of the self-scouring types. Soap costs are minimized. Rust preventive: Water emulsions of Twitchell 7421 are very effective inhibitors of corrosion and rust.

A descriptive technical bulletin covering this product is available on request from: Emery Industries, Inc., Dept. 5, Carew Tower, Cincinnati 2, Ohio.

Engineered Color

Barreled Sunlight Paint Co. announces a new service, "Engineered Color," which is described as combining the thinking and experience of top lighting and seeing authorities with Barreled Sunlight's more than 60 years of specialization in maintenance paints for industrial and other larger buildings.

"Engineered Color," says Everett B. (Doc) Nelson, the company's color engineer, "offers a full palette of the colors which this combined experience has shown are most suitable for work interiors, and from which an almost limitless variety of 'custom-built' schemes can be created to meet the special needs of any interior. Each group has been carefully engineered for its contribution to the over-all 'brightness pattern,' and each is made in an appropriate heavy-duty finish especially formulated to give the utmost in serviceability and long-range economy on the particular surface for which it is intended."

Southern representatives of the company may be contacted and asked to explain personally to any textile plant executive and, if desired, the representative will make a survey of the plant which can be sent to the Barreled Sunlight headquarters at Providence, R. I., and converted into a formal, custom-built presentation without charge or obligation. Two representatives have recently been added to the Southern staff of Barreled Sunlight; they are Thomas J. Edwards, Jr., of 227 Pendleton, St., Greenville, S. C., and James O. Weddle of 112 Colony Rd., Silver Springs, Md. The firm's Southern district manager is C. L. Park of Tucker, Ga.; other representatives are Thomas C. Roggenkamp of 435 Wakefield Dr., Charlotte, N. C.; Alfred G. Malone of Orlando, Fla.; and P. R. Singletary of 3382 Mathieson Rd., N. E., Atlanta, Ga.

Flex-Beam Guardrail

Originally developed to promote highway safety, and widely used for that purpose today, Flex-Beam guardrail is now being used to protect walls, partitions, parking lots and other "bump-spots" in industrial plants. The guardrail is used both inside and outside the plant, wherever there is danger of tow-trucks and cars bumping into walls and stationary equipment.

Flex-Beam guardrail is a beam-type rail, deeply corrugated for strength and erected without tension. It is fabricated from semi-spring quality steel and punched for mounting. Splicing is by seven heat-treated high carbon bolts. A waterproof, rust-inhibiting paint primer is applied after fabrication.

Additional information may be obtained from Armco Drainage & Metal Products, Inc., Middletown, Ohio.

Carton Sealing Tapes

How seven "Scotch" brand pressure-sensitive tapes can be used for various carton sealing and reinforcing tasks is shown in a new six-page booklet. The booklet—describing tapes Nos. 250, 280, 320, 710, 720, 880, and 890—is available on request from Minnesota Mining and Mfg. Co., St. Paul, Minn.

It contains 25 photographs of such applications as the taping and reinforcing of heavy fibreboard containers, telescope cartons, and numerous other cartons and boxes for air, rail, and truck shipment. Use of the tapes on manual, semi-automatic, and fully automatic dispensing and sealing equipment is also shown.

The seven tapes described include paper tapes, rayon reinforced paper filament tapes, colored and transparent acetate fibre tapes, colored and transparent rayon reinforced plastic filament tapes, and glass reinforced transparent plastic filament tape. (The latter having a tensile strength of 500 pounds per inch of tape width.) A table listing the tapes' properties—all "engineered for carton sealing and reinforcing applications"—describes the thickness, elongation, tensile strength, and adhesion of each.

Dextrol Silk Oils

Two new silk soaking oils are now being marketed by Dexter Chemical Corp., New York. Dextrol Silk Oil No. 42, designed to soften the gum of China and Japan silk in preparation for winding and throwing, forms an emulsion which exhausts on the silk, according to the company. It is used in standard soaking equipment. Dextrol Silk Oil No. 84 is said to be particularly satisfactory for Duoppioni silk and has excellent stability. Active ingredients exceed 85 per cent.

Industrial Nozzle Bulletin

Anyone interested in spray nozzles for humidification in textile mills and processing plants will find a wealth of information in a new 40-page industrial nozzle bulletin just published by the Binks Mfg. Co., of Chicago.

This bulletin is said to be one of the most comprehensive and best organized books ever prepared on the subject. It fully describes industrial spray nozzles for a broad range of commercial and industrial processes. Data given include nozzles dimensions, capacities and spray angles. All nozzles are illustrated and in many cases cutaway drawings showing the construction and operation of the nozzle are included. Blue print drawings indicate proper installation details where this information is required. In short, this bulletin includes everything a buyer or designer needs to select the correct nozzle for a specific application or process.

Bulletin 5200 has a unique and very handy index that lists 29 different applications for industrial spray nozzles with page references for each. By using this index full information on nozzles for any specific process can be quickly and easily found.

Copies of Binks Industrial Nozzle Bulletin No. 5200 will be mailed free to all readers of this magazine who request it on their letterheads. Address request to: Binks Mfg. Co., 3122 Carroll Avenue, Chicago 12, Ill.

Baldwin Conveyor Belt

Baldwin Belting, Inc., 76 Murray St., New York, N. Y., announces a new conveyor belt for carrying packages or articles up or down inclines of 25 to 30 degrees. This belt, Tread-Top, has a non-skid cover that grips like the tread on a tire. It is made with a special light-weight closely woven fabric having exceptional tensile strength. The fabric is full width. It is not folded and has no splices. Its remarkable flexibility enables it to run perfectly over pulleys as small as two inches in diameter.

Tread-Top is made with natural rubber throughout. The non-skid cover is all natural rubber and a skim coat is used between all plies. Tread-Top is calendered and press cured exactly the same as the heaviest conveyor belt. It can be easily cleaned and the rich brown color is pleasing to the eye. There is no black to mark the products carried. The multiple plies hold metal fasteners exceptionally well. The new conveyor belt is waterproof and has a minimum of shrinkage. The fabric is protected by the natural rubber which completely covers all the fibers in the fabric. The belt can be vulcanized endless with a multiple step lap which will last as long as the belt itself, the company claims.

American Thread Booklet

The *Story of Thread*, a booklet giving a concise history of the making of thread and describing in layman terms the technical manufacturing processes and methods involved in modern thread manufacture, was released recently by the American Thread Co. The booklet also describes the careful attention to quality control necessary to insure the maintenance of highest quality standards of thread products and also stresses the importance of the human factor in the manufacture of high quality thread products.

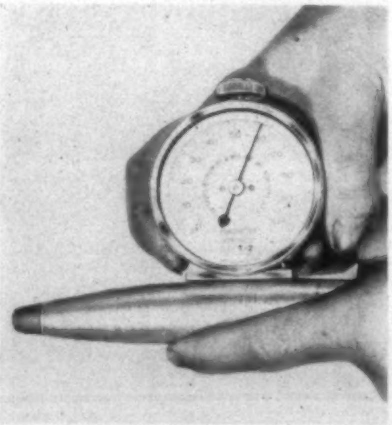
The *Story of Thread* describes the manufacturing processes for all types of thread ranging from cotton through the many new synthetics which have assumed such an important part in the textile field.

The booklet will be distributed to schools, libraries, teachers, employees of the American Thread Co., as well as to the people in the communities where American Thread's plants, warehouses and sales offices are located. Copies of the *Story of Thread* may be obtained upon request from the American Thread Co. at any of its locations or from the public relations department of the company at 260 West Broadway, New York, N. Y.

New Colton Plant

Bernard R. Krashin, vice-president of Colton Chemical Co., Cleveland, Ohio, announces the opening of a new plant where polyvinyl alcohol, manufactured under the trade name, Vinol, will be produced. Colton's completely new, modern, four-story building incorporates the latest developments in vertical flow and airveying systems. These improved facilities have stepped up the production of Vinol dry resin powder to a point where Colton Chemical Co. is now one of the major producers of polyvinyl alcohol.

New Testing Instrument



For uniform unwinding in later processes for the textile industry it is necessery that packages of yarn be wound to a uniform density. Aware of the problem in maintaining uniformity, Shore Instrument & Mfg. Co. has created a precision testing instrument for the textile industry. Called the Durometer, this new instrument is expressly created for testing the density of windings on cones, spools, bobbins, cops and package dyeing tubes. Any variation in density among a lot of bobbins can be determined by the use of the Durometer. Thus, once the density has been determined, a standard can be set for uniform winding, the company claims.

The use of the Durometer is simple. The Durometer consists of an easy-to-read dial graduated in units from zero to 100. At the bottom, a blunt pin projects a standard distance. When pressed firmly against a test sample, the pin is forced back into the instrument in proportion to the density of the winding. The tighter the winding, the more it resists penetration of the pin and consequently, the higher the reading.

The pin is mounted on standardized twin-leaf springs within the instrument. A pressure of two pounds is required to deflect these springs to their maximum limit. On an impenetrable test sample, this would yield a dial reading of 100, or slightly in excess thereof. The ready adaptability of the Durometer to free hand testing permits tests to be made on bobbins that are attached to winding machines, etc. The instrument may be held in any position, even inverted.

An operating stand is also available to

facilitate the use of the Durometer. Information and literature can be obtained by writing to the Shore Instrument & Mfg. Co., Inc., 90-35 Van Wyck Expressway, Jamaica 35, N. Y. Ask for Bulletin R-8.

General Dyestuff Circulars

General Dyestuff Corp., 435 Hudson Street, New York City, announces release of six new circulars: G-709, Naphtol AS-DB; G-714, Fastusol Blue LFGL; G-715, Fastusol Orange RRL-CF; G-716, Celliton Fast Blue FFRN-CF; G-717, Celliton Fast Navy Blue BA-CF; G-718, Celliton Fast Red Violet RNA-CF.

Naphthol AS-DB is a substantive Naphtol of the AS series, which is used on cotton and rayon yarns and piece goods for dyeing brown shades with mostly good to excellent fastness properties by coupling with fast color salts or diazotized fast color bases.

Fastusol Blue LFGL is a new straight direct dyestuff developed for dyeing fast-to-light blue and combination shades on cotton and rayon. An outstanding feature of this blue is its suitability for use on rayon piece goods that are to be given an anticrease resin finish as the shade and light fastness of dyeings on rayon are scarcely affected by resin finishing. Other important features are dischargeability and suitability for improvement of wet fastness with Solidogen WF Pdr. and copper salt.

Fastusol Orange RRL-CF is a new straight direct dyestuff developed for dyeing fast-to-light oranges of good tinctorial value on cotton and rayon. It is especially important for dyeing rayon piece goods that receive an anticrease resin finish because it is almost unique among oranges—particularly reddish oranges—in that its fastness to light is scarcely impaired by such aftertreatment.

Celliton Fast Blue FFRN-CF is a straight, readily dispersible anthraquinone dyestuff, which dyes acetate and also nylon directly to give very bright, fast-to-light blues.

Celliton Fast Navy Blue BA-CF is a straight, readily dispersible, direct-dyeing dyestuff (Pr 232) for cellulose acetate and also for nylon, which gives deep navy shades characterized by better than average fastness to light and by little change of shade in artificial light.

Celliton Fast Red Violet RNA-CF is a straight, readily dispersible anthraquinone dyestuff (Pr 237), manufactured for the direct dyeing of very bright red-violet shades of excellent light fastness and very good tinctorial value on cellulose acetate. It may also be used for equally bright violet shades of good light fastness on nylon.

Cleveland Tramrail Booklet

The Cleveland Tramrail Division of Cleveland Crane & Engineering Co., Wickliffe, Ohio, announces availability of a revised edition of its Booklet No. 2008-H, "Cleveland Tramrail Engineering and Application Data." According to the firm this booklet is designed to give anyone a good conception of what tramrail overhead materials handling equipment consists of and how it can be applied to bring about one or more of 15 definite advantages, one of which is the lowering of manufacturing costs. Of special interest is the section on new material covering track design, track stresses and the solution of track peening. All of the more important features of overhead tramrail equipment are described, including the flexible method of track support, carrier designs, motor head construction, track switches, cranes, automatic interlocks and types of electrification.

Hartamine

Hart Products Corp., 1440 Broadway, New York City, announces the development of Hartamine, an assistant for printing and dyeing aniline black. It is claimed that the addition of ten to 15 per cent of Hartamine to the regular aniline black formula prevents aniline black from turning green, maintains the tensile strength of the fibers, reduces the steaming time, improves the stability of the padding liquors and printing pastes, and eliminates aniline oil odor in the finished goods. Hartamine is a concentrated dark colored liquid product. Samples, data sheets and application formulas are available.

Firm Name Changes

Effective May 15, Wamesit Warper Co., 40 Church Street, Lowell, Mass., began operating under the name of Allen Warper Co. R. Udell Thornton, president of Allen Warper Co., New Bedford, Mass., is president-treasurer of the company. William L. Peterson, assistant treasurer-secretary, is in charge of production. Allen Warper Co. will continue to manufacture warpers, beamers, ballers and creels. Genuine replacement parts for Saco-Lowell, Entwistle and Allen warpers will be carried in stock.

Hartex Defoamer S

Hart Products Corp., 1440 Broadway, New York City, has introduced Hartex Defoamer S, a new development in anti-foaming agents, which is said to eliminate foam with exceptional efficiency. This anti-foaming agent, available as viscous, cream-colored amulsion, is said to offer the following advantages in handling and use: (1) extremely effective anti-foaming action, (2) wide application, (3) no loss of efficiency due to evaporation, (4) no refoaming takes place, (5) economy—low cost per job done, (6) effective over the entire pH range, and (7) ease of handling.

In such operations as roller printing, dyeing, scouring, kier boiling, heavy soaping, package yarn dyeing, and in de-foaming weighter solutions for knitgoods, very small quantities of Hartex Defoamer S are claimed to be remarkably effective in minimizing or eliminating foam completely.

Ahco Advertising Cited

In the recent annual national creative awards contest held at Skytop, Pa., by the National Advertising Agency Network— a group of 31 associated advertising agencies located in this country and Canada—Arnold, Hoffman & Co., Inc., of Providence, R. I., was given an Award of Merit for its current four-color dyestuff insert series appearing in the textile trade press. The announcement of the award was made by Oakleigh R. French, managing director of the National Advertising Agency Network, who noted that more than 350 entries were made in the contest which was judged by 29 nationally recognized advertising executives. Arnold, Hoffman's agency, the George T. Metcalf Co. of Providence, a member of the National Advertising Agency Network, had entered the insert series featuring Ahcovat dyes in the business paper product advertising division of the creative awards contest.

New Acme Plant

Construction has been virtually completed on a new 9,000 square foot one-story plant in Charlotte, N. C., for Acme Soap & Chemical Co., a recently-incorporated North Carolina affiliate of Acme Soap Co. of Cambridge, Mass. The plant involved estimated investments in excess of $150,000, including the building, railway siding, and land.

The Acme Charlotte plant will manufacture soap and various detergents for household and industrial uses. Much of the plant's production will be marketed in the textile industry.

J. V. Eichorn, a son of the original Acme corporation's president, is president of the Charlotte facility, which will be operated under the personal direction of Robert L. Eichorn, treasurer, and brother of J. V. Eichorn.

Warner & Swasey Bulletin

A new eight-page bulletin—available on request to the Warner & Swasey Co., Cleveland 3, Ohio—details and illustrates actual installations of the company's pin drafters, and recites case history facts on resultant cost savings, production increases and waste reduction.

Picker Apron Co. Sold

All the capital stock of the Todd-Long Picker Apron Co., Gastonia, N. C., has been purchased by four Gastonia investors, according to an announcement by W. Truett Long. Mr. Long, the principal stockholder, said the business changed hands at the close of business on June 4. A small minority interest in the corporation, held by Mrs. W. Truett Long and B. W. Long, was also sold. The new owners are W. A. Klutz, J. R. McGerrigle, Arthur Bradley and Earl Ferguson. The four men announced that business operations will continue in the same location undisturbed under new management.

Honeywell Bulletin

A revised issue of its Bulletin No. 15-14, "Instruments Accelerate Research," has been made available by Minneapolis-Honeywell Regulator Co., Brown Instruments Division, Station 40, Wayne and Windrim Avenues, Philadelphia 44, Pa. The bulletin has been augmented to include many items not covered in the previous edition and has been brought up to date to include the latest designs of various analytical equipment. The bulletin now comprises 96 pages and has complete illustrations with pictures of the latest instrument and equipment in the laboratory, analytical and measurement fields. Copies of the bulletin are available on request to the company.

Joint U. S. Buying Unit Approved

Defense Secretary Robert A. Lovett last month placed his stamp of approval on the Munitions Board's plan for a joint armed services buying agency for clothing, textiles and footwear. The program is expected to be put in operation by Oct. 1.

The new agency will, for the first time, centralize the uniform and textile procurement activities of the Army, Navy, Air Force and Marine Corps in one office in New York. The agency will take over the facilities now operated by the New York Quartermaster Procurement Agency.

While the Army will be officially charged with the management responsibility for the agency, the actual operation of the program will be handled by a directorate composed of the Army Quartermaster General, the chief of the Navy's Bureau of Supplies and Accounts, the commanding general of the Air Materiel Command and the Marine Quartermaster General "or their designated representatives." The chairmanship of the group will be on a one-year rotating basis.

Under the timetable set up for the new agency, the directorate will be charged with the job of working out organization details, staffing needs, space requirements, and similar technicalities by Aug. 1. By Sept. 1, the timetable calls for the directorate to have completed plans for "interim procedures" which will govern the actual operation of the agency for the first few months of its existence.

The actual procurement activities of the agency are scheduled to start Oct. 1, and defense officials predict this deadline will be met. The timetable also calls for the agency to operate under the interim procedures until about Feb. 2, when "permanent procedures" will be put into effect based on effectiveness of the preceding months' operations.

Army Aids 'Distressed Employment' Areas

Ninety-two contracts, each in excess of $10,000, were awarded to 76 firms during the month of May by the New York Quartermaster Procurement Agency, to manufacturers whose plants are located in surplus labor areas, it was announced June 13 by Brig.-Gen. R. P. Hollis, commanding general of the agency. The areas covered were located in the states of Illinois, Massachusetts, Michigan, New York, Pennsylvania, and Rhode Island.

During May N.Y.Q.M.P.A. awarded $113,401,156—in contracts exceeding $10,000 each in value—in the purchase of clothing, textiles, chemicals and miscellaneous supplies.

The over-all dollar value of such contracts awarded to manufacturers in surplus labor areas totaled $21,798,357, or 19.2 per cent of the total funds expended for the month of May, 1952. A total of 441 contracts (over $10,000 each) were awarded by N.Y.Q.M.P.A. during this period. As indicated above, 92, or 20.9 cent of these contracts were given to firms located in distressed employment areas.

During the month of May, said General Hollis, 25 per cent of the total N.Y.Q.M.P.A. procurement for the month was, on a dollar basis, placed directly with small business firms—56 per cent on the basis of contracts awarded. It is probable that many other small business plants have benefitted indirectly through subcontracts.

Automatic Start-Stop Controller

Everett J. Spencer, who operates a small weaving mill at Rockford, N. C., about 12 miles east of Elkin, N. C., has invented an "automatic start-stop controller" which he claims can be applied to slashers, winding machines, looms and knitting machines.

Mr. Spencer outlines the operation of his device as follows:

When a yarn end breaks or a spool or cone runs out of yarn or the thread becomes slack, a red pilot lamp lights up and the machine stops. The operator goes back into the creel section and repairs the broken end, replaces the empty cone or takes up the slack in the thread.

Then, without returning to the control panel, the red pilot lamp lights up, and the machine automatically starts running again.

This invention eliminates the necessity of the operator walking back to the control panel to restart the beamer-warper after mending each loose yarn end or making the other necessary repairs.

The controller operates through a relay switching mech-

HIGH QUALITY COMBED and CARDED KNITTING and WEAVING YARNS

BEAMS, CONES TUBES, WARPS

MARTHA MILLS DIVISION, Silvertown, Georgia

LARGE PRODUCTION . . . UNIFORM QUALITY . . . LATEST MACHINERY

• SOUTHERN SALES AGENTS: **Walter T. Forbes Co.** PHONE L. D. 28, CHATTANOOGA, TENN.

anism that is fireproof and shockproof, Mr. Spencer claims.

Provision is made in the mechanism for installing on each eyeboard pilot lamps which light up when a yarn end breaks. This will indicate breakouts automatically.

Mr. Spencer says that there were 17 different types of patented automatic stop motions in textile machinery but no automatic start motions.

The inventor claims that a search of patents had revealed no previous invention of this type in existence. For the past three months he has been using the automatic start-tsop controller in routine operation without breakdowns or irregularities.

"The controller is easy to fabricate and mass produce," he said. "It is small in size and adaptable to any existing textile machinery with slight adjustments."

The 42-year-old mill owner returned to the United States from Panama about a year ago to take up residence at Rockford. Since then he has worked on the controller in his spare time. He also revealed that he is engaged in working on another invention which he claims will allow the elimination of beaming departments in textile mills. "But it's just in the experimental stage," he said.

Book On Management Development Techniques

The Development of Executive Talent, edited by M. Joseph Dooher and Vivienne Marquis, American Management Association. This book is a complete and authoritative company guide to executive training and management development. It is a manual designed to meet the needs of any company contemplating the introduction of a program of executive development for the first time, or desiring to improve its present program.

The main body of the book is divided into nine parts, consisting of 50 chapters, including an appendix and a bibliography. Subjects covered include: setting up the program—basic principles and practices; organization planning; putting the program into action; special approaches, techniques and programs; getting results from follow-up counseling; program evaluation; trends in management development; and case studies of representative companies.

The A.M.A. compilation is not a bible of precise "how to do it" rules, but a record of the application of common sense to the personnel problem of middle and top management development under a wide variety of corporate situations—industrial, commercial, functional, geographic, etc. While no step-by-step solution to individual problems can be catalogued, a pattern of action is noted, which seems to

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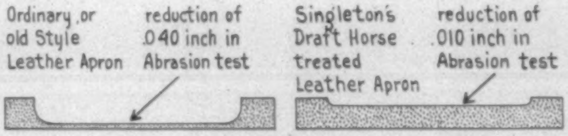
The Spinning Qualities of Leather with the Endurance of Synthetic—

SINGLETON'S NEW TYPE TREATED LEATHER APRON

(Available either Endless or Open)

Developed after months of research and testing. Singleton's New Type Leather Aprons (Pat. Pending) enable the spinning of a more even yarn than has been possible before with any aprons—ordinary leather or synthetic. Singleton's resin-reinforced Draft Horse Aprons now have 400% greater resistance to abrasion than ever before.


Ordinary or old Style Leather Apron
reduction of .040 inch in Abrasion test
Singleton's Draft Horse treated Leather Apron
reduction of .010 inch in Abrasion test

Showing the result of a Taber Abrasor Test of 3,000 cycles. Singleton's New-Type Treated Apron had 400% greater resistance to abrasion.

MORE EVEN YARNS

—that's the results you want. That's what you can get with Singleton's New Type Treated Aprons. Combining the advantages of leather and synthetic, and eliminating the disadvantages of both, these finer aprons reduce yarn variation from 10% to 50%.

To test these better-than-ever Singleton Aprons for yourself, write, wire, or telephone today to the Company, or to the representative nearest you.

RUSSELL A. Singleton & SONS
BLANCO, TEXAS

Southern Manager
GEO. W. SINGLETON, Calhoun Towers, Greenville, S. C

S. C. Representative
WILLIAM S. JOHNSTONE, P.O. Box 1757, Greenville, S. C.

N. C. Representative
HAMNER SALES AGENCY, P. O. Box 287, Gastonia, N. C.

Ala. and Ga. Representative
INDUSTRIAL SUPPLIERS, INC., LaGrange, Ga.

find favor among the keenest practitioners in the field, recurring time and time again.

A working blueprint of the principles and tested practices underlying sound executive training and management development for all sizes and types of companies, this handbook contains specific, practical guidance on all the problems involved at every stage of planning and administration —from the analysis of needs, through the discovery of latent executive ability, to the inventorying, rating and development of executive skills. Forty-four authors contributed to the compilation.

Copies of *The Development of Executive Talent* are available from the American Management Association, 330 West 42nd St., New York 36, N. Y.

1953 Plant Maintenance Show In Cleveland

The Plant Maintenance Show, attended each year by top executives of virtually every industry, has been scheduled for the public auditorium in Cleveland in 1953, it was announced by Clapp & Poliak, Inc., New York, which conducts the exposition. The dates are Jan. 19 to 22, inclusive. The show, which developed from new management techniques in preventive maintenance, has risen in three years to one of the nation's foremost industrial expositions. Experts from all parts of the world attend.

The 1953 show will be almost 75 per cent larger than its 1952 counterpart. Exhibits will cover a gross area of 110,000 square feet. Compared to the first show in 1950, it will have almost four times as many exhibiting companies and cover about six times as much area. At least three companies, General Electric Co., Westinghouse Corp., and Clark Equipment Co., each will have displays covering three thousand square feet. Three hundred and fifty other companies are expected to conduct exhibits.

The Plant Maintenance Conference, conducted by Clapp & Poliak during the first three days of the show, also will be held. The conference broke all attendance records for this type of gathering in Philadelphia earlier this year. Advance registration cards may be obtained from Clapp & Poliak, Inc., 341 Madison Ave., New York 17, N. Y.

Howard Bros. Officials Eulogize Ralph Shorey

A recent issue of *Howard Way,* house organ of Howard Bros. Mfg. Co. of Worcester, Mass., contains an expressive tribute to the late Ralph C. Shorey, who was the firm's New England and Canadian representative. Signed by Harry C. Coley and Neal A. Mitchell, president and general manager, respectively, the eulogy is as follows: "The 22 years during which Ralph C. Shorey was a member of our organization have slipped by too fast, much too fast. When we first met we were impressed by his character and his extensive sales experience and the possibilities of our industry appealed to him. That he had no contact with the manufacture of textiles in his previous activity was no obstacle. At once he found great pleasure in studying practical card room conditions and being blessed with a keen intellect, he accumulated an astonishing fund of useful information in an astonishingly short time. This he used to such good purpose that his advice and help in solving card room difficulties was eagerly sought and freely given. Because of his pleasant personality and desire to be helpful he was always warmly welcomed by our many mill friends. In fact, he was counted a friend of their organizations. All through his life he proved the saying, that to have a friend, one has to be one; testimony to this is abundant in the many letters of comfort and sympathy we have received since his sudden death on May 25. Ralph's main object was to truly represent 'his' company and to support its reputation for quality and personal service. This he did with devotion and loyalty—his outstanding characteristics. His influence will always be an inspiration to us as with renewed effort, we continue the same friendly personal service he gave so unstintingly. He loved people and people loved him."

L-O-F Offers New Finer Fiber Glass Yarns

An additional series of glass textile yarns, doubling the number of specified types produced, has been announced to the weaving trade by the fiber glass division of Libbey-Owens-Ford Glass Co. Clinton F. Hegg, general sales manager, reported that the Parkersburg, W. Va., factory is now producing "225" industrial yarns, a considerably finer type than the "150" series with which L-O-F started its operations a few months ago.

The new yarns are used largely in industrial cloth, electrical insulation, plastic laminations for aircraft construction, tape, and similar applications. Mr. Hegg said the new finer yarns will go on a six to eight-week delivery schedule, will be manufactured to standard industry specifications, and packaged to suit the customer.

Yarns are made up of strands twisted and plied to suit the end-use. The "225" series means that each strand runs

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22,500 yards to the pound. A strand is composed of 204 separate continuous filaments of fiber glass. Each filament of this size avearges 28 hundred-thousandths of an inch in diameter. Some of the yarns, for instance, are made of three strands twisted and then two of these plied together. This gives the final cloth product its great strength and flexibility while retaining the glass characteristics of resistance to heat, moths, electricity, bacteria, and many chemicals.

D.P.A. Approves Increased Synthetic Output

The Defense Production Administration July 1 approved an immediate expansion in the production of synthetic fibers amounting to 200 milion pounds. Of this, 120 million pounds has not previously been scheduled. Of the increase, 170 million pounds was allocated to nylon and 30 million pounds to Acrilan, an acrylic fiber manufactured by Chemstrand Corp., jointly owned by American Viscose Corp. and Monsanto Chemical Co. The latter had previously been approved by D.P.A.

This program constitutes the whole of D.P.A.'s expansion program for man-made fibers with the aid of accelerated depreciation, it was reported. The size of the program had earlier been reported as between 600 million and 800 million pounds, and apparently it was the intention of the agency at one time to approve such a program. However, pressure brought on D.P.A. by interests representing cotton, wool and other natural fibers, delayed the program and reduced its size.

The 50 million pounds of nylon for which Chemstrand received a certificate of necessity in March, 1951—at the same time it received a similar certificate for 30 million pounds of Acrilan—also is included in the 170 million pounds of nylon allocated. Therefore, the total new productive capacity for nylon provided in the program announced July 1 is only 120 million pounds.

Ralph Trigg, D.P.A. deputy administrator for programs and requirements, who announced the expansion goal, told reporters that military requirements specified a need only for nylon. He said D.P.A. did not presently plan any goal for expansion of facilities to produce other non-cellulose fibers or high tenacity rayon, rayon staple or rayon filament yarn. He explained that expansion of high tenacity rayon facilities was not considered necessary because additional capacity was not required now to meet military needs.

Cruise Convention Attracting Reservations

According to Owen Fitzsimons, executive vice-president of the Carded Yarn Association, a large number of reservations already have been received for the joint convention of the Carded Yarn Association and the Southern Combed Yarn Spinners Association which will be held along with a cruise to Bermuda in November.

The cruise will be on the Ocean Monarch, which will sail from New York at 6 p.m., Nov. 14. Most of the passengers, however, will board the ship at Norfolk, Va., at 3 p.m. Saturday, Nov. 15. On Saturday afternoon, the Association of Cotton Yarn Distributors of which Frank Slack of Philadelphia, Pa., is president, will entertain members of the two organizations and their guests at a reception.

Sunday will be spent cruising the Gulf Stream with no program planned except religious services in the morning. The ship will get to Bermuda Monday morning and will tie up at the dock. It will be used as a hotel and meals will

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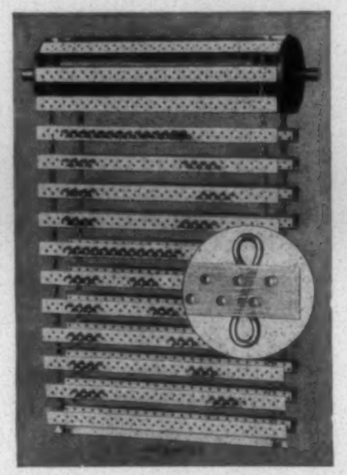

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be served on board during the stay in Bermuda. A golf tournament will be conducted on the island.

The ship will sail on the return trip at 3 o'clock Wednesday afternoon, Nov. 19. Prizes won in the golf tournament and in ladies' bridge parties will be presented the afternoon and evening the ship leaves to come home.

Thursday morning, there will be separate closed meetings of the two associations. In the afternoon, there will be a joint meeting with Robert C. Jackson, executive vice-president of the American Cotton Manufacturers Institute, and William Rhea Blake, executive vice-president of the National Cotton Council, as speakers.

The ship will arrive at Norfolk at 9 o'clock the morning of Nov. 21 and at New York at 9 o'clock the next morning. Mr. Fitzsimons explained that persons making the trip must get off at the same place at which they embark.

Group Probes Problem Of Static Electricity

A seven-man advisory committee on static electricity, in full agreement that the problem of static in the newer synthetic fibers must be met quickly and efficiently, is preparing for the first formal meeting this Fall.

Formed under the auspices of the New York Section, A.A.T.C.C., to "recommend fields of research related to static electricity for study by the national A.A.T.C.C. as well as for a paper on static to be presented in the society's annual intersectional competition," the group met informally at a luncheon in June. Immediately after the session, committee members were requested by Chairman Sidney M. Edelstein, Dexter Chemical Corp., to submit suggestions "as to methods or points of attack on the static problem" to be used as material for discussion at the September meeting.

Mr. Edelstein, appointed chairman by Dr. E. W. K. Schwartz, chairman of the advisory research committee of the New York Section, outlined briefly some of the problems confronting textile manufacturers and consumers as the result of static and then introduced each member of the newly-formed committee. Other members, besides Mr. Edelstein are Dr. O. I. Bloom; J. B. Goldberg, J. P. Stevens Co.; Robin Beach, Beach Engineers, Inc.; S. C. King, Carbide & Carbon Chemical Co., a Union Carbide & Carbon Corp. division; Dr. S. W. Brainard, E. I. du Pont de Nemours & Co., and J. J. McGuinness, Dexter Chemical Corp., secretary.

Mr. Goldberg, discussing static in mills where the newer fibers are being handled, asserted that the charges were so great that troubles and slowdowns occurred regularly. Both Dr. Brainard and Mr. King reported that their companies were seeking chemical means to meet the problem of static in the processing and use of the synthetic fibers. Both were in agreement that it was necessary to find a finish which not only would eliminate or minimize static but enable the user to wash or dry clean garments without removing an anti-static finish.

The group also discussed the lack of instrumentation which is holding back research into the problem and the unreliability of the method of testing for static with present equipment.

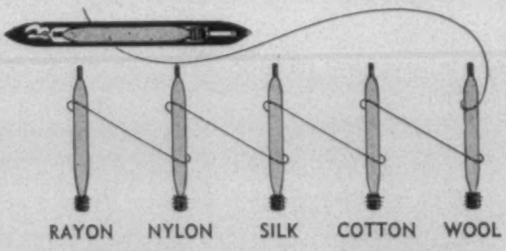
Wool Bureau Sees Major Upturn At Hand

An industry-wide cycle of inventory replenishment, which traditionally represents a major upturn in demand, is underway in the textile and apparel industries, according to an analysis made public July 8 by the Wool Bureau, Inc. Reports of increasing Summer clothing sales from all areas of the country indicate further that consumers are convinced present prices are stable and satisfactory and they are, therefore, replenishing their wardrobes. This pattern of consumer buying will be accelerated during Fall and Winter in the opinion of retailers, the bureau adds.

"The drastic liquidation of textile and apparel inventories pursued by manufacturers and retailers in the past 18 months supports the view that renewed activity is more heavily influenced by the need for industry-wide inventory replenishment than by any startling rise in consumer demand—although the later is a factor," states the Wool Bureau.

"It is becoming increasingly apparent in most sections of the textile and apparel industries that textile demand is on its way up," the bureau points out. "This coincides with trade reports of limited inventories of certain cotton textiles for immediate or near-term delivery; withdrawal of women's wear wool fabric lines because mills are booked up and retail shortages of wanted numbers in men's tropical worsted suits."

According to the latest report of the Department of Commerce, at the end of April the dollar value of manufacturers' textile and apparel inventories were 17 per cent below a year ago and 22 per cent below their peak in July, 1951, the bureau declares. Similarly, inventories of retail stores and general merchandise stores were off 12 per cent from a year ago and 15 per cent from their peak in May, 1951. Further support for optimism is seen in the



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fact that stock-sales ratios of department store clothing sections are greatly reduced from a year ago. At the end of April stock-sales ratios ranged from almost 50 per cent lower in the boys' wear departments to seven per cent lower in men's main store clothing departments.

"Favorable reports of Summer clothing sales from all areas of the country indicate two things: one, consumers are no longer suspicious of prices and are replenishing their wardrobes; two, they are very likely to follow the same pattern of replenishment in the Fall and Winter season, in view of the fundamental strength of our national economy."

The gathering force of inventory demand for wool fabrics coincides with the end of the Dominion wool auction season, the bureau declares. Accelerated mill consumption of wool will require rapid replacement of mill stocks. The last report of trade stocks of raw wool, that of April 1, indicated that they were adequate only at the recent low levels of mill consumption.

"During the next two months, before the Dominion auctions reopen, American consumers are protected against wool shortages only by spot supplies of the domestic clip. Daily reports of sales of entire ranch clips out West attest to the anticipation of a good season ahead. The buyers of these wools obviously are confident that the tide has turned and realize that wool prices are low in relation to other basic raw materials and to supply and demand. Domestic wools today are selling at a discount on comparable Australian types. Prices of the latter rose 25 to 30 per cent between the pre-Easter lowpoint and the close of the Australian auctions in June. Domestic wool has failed to follow this pattern.

"Remaining unsold stocks in Australia at the end of April amounted to less than 100 million pounds and by the time auctions were drawing to a close in June, offerings were being reduced and some auctions cancelled because of inadequate offerings," the bureau notes.

"Revised world consumption and production statistics released at the International Wool Conference in London indicates a much closer balance between supply and demand in 1951 than was originally estimated. The small increase in world production during the current season and a carry-over from the last year's clip would permit an increase of only eight per cent in 1952 world consumption over that of 1951 without drawing on existing inventories in the hands of mills. These total 876 million pounds and are the equivalent of only 4½ months' consumption at the 1951 rate which was 16 per cent below 1950 consumption."

T.R.I. To Study New Tests For Cotton Fiber

The United States Department of Agriculture, through the Southern Regional Research Laboratory of the Bureau of Agricultural and Industrial Chemistry, has contracted with Textile Research Institute of Princeton, N. J., to study new tests for cotton fiber characteristics which may relate to processing behavior. The project, supported under provisions of the Research and Marketing Act, is scheduled for a period of two years, according to a joint announcement made by the institute and the Southern Regional Research Laboratory.

The testing and research program at Textile Research Institute will be carried out on a large number of standard and experimentally-grown cotton varieties made into yarns

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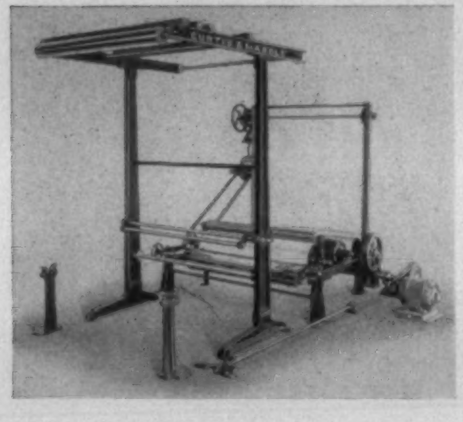

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at the U.S.D.A. fiber and spinning laboratory of the Production and Marketing Administration at Clemson, S. C., and on several large master samples of cotton processed into yarns and fabrics on a pilot-plant, or semi-commercial, scale. An important part of this program is the measurement of single-fiber properties and the comparison of these properties with the properties of cotton in bulk and in yarns constructions. The newly installed punched-card computing laboratory at the institute will be used to aid in correlating the results of the various tests with each other.

Although this research for the Department of Agriculture is to be a unit in itself, it will be integrated into the larger Textile Research Institute cotton research project which is being supported by industrial members of the institute. The institute has been engaged on this five-year cotton project since last September. The over-all purpose of this research is to extend present knowledge on the relationship of fiber properties with processing behavior and end-product quality.

The general direction of the institute project lies with the T.R.I. cotton research advisory committee, composed of representatives of the various project sponsors. These include The American Thread Co.; Anderson, Clayton & Co.; Bates Mfg. Co.; Chicopee Mfg. Corp.; Cone Mills Corp.; Dan River Mills, Inc.; Deering, Milliken Research Trust; Dunean Mills (J. P. Stevens and Co., Inc.); Fabric Research Laboratories, Inc.; Harris Research Laboratories; Joanna Cotton Mills Co.; Johnson and Johnson; National Cotton Council; Office of Naval Research; Pepperell Mfg. Co.; Personal Products Corp. (Johnson and Johnson); Standard Chemical Products, Inc.; U. S. Department of Agriculture; U. S. Rubber Co.; U. S. Testing Co., Inc.; and West Point Mfg. Co.

Dr. Helmut Wakeham, who is project director for the larger Textile Research Institute cotton research project, will also be project leader in the contract work of the U. S. Department of Agriculture. The contract project leader for the Department of Agriculture will be Mason DuPre, Jr., special assistant to the director, Southern Regional Research Laboratory.

A.S.T.M. Stresses Importance Of Research

At the 50th anniversary meeting of the American Society for Testing Materials held at the Hotels Statler and New Yorker in New York City throughout the entire week beginning June 22, there were presented 165 papers in some 40 formal and informal technical sessions and 70 reports from the technical committees. The unusually strong technical program was arranged to commemorate the society's formal incorporation as a national technical society in 1902, together with the 450 technical committee meetings and the society's largest exhibit of testing apparatus and scientific instruments, attracted a record-breaking number of engineers and materials mean totaling 2,606, the official registration.

Despite a decision on the part of some of the larger committees to keep to a minimum the number of their subcommittee and section meetings to permit more active participation of technical sessions, there were still 450 meetings throughout the week. These ranged in length from one-half hour to three days.

As a result of recommendations in the some 70 committee reports at the meeting, 75 new specifications and tests were approved for publication for the first time. Most of the committees have concentrated during the first half of this year in revising their standards so that they would be up to date for the new 1952 edition of the *Big Book* of A.S.T.M. standards to be issued later this year, and in reviewing tentatives to be adopted as final standards. Some 90 existing tentatives were recommended for adoption as formal standards subject to society letter ballot. Also there are about 270 standards and tentatives in which revisions are to be incorporated.

Retiring President, T. S. Fuller, engineer in charge of works laboratory, General Electric Co., Schenectady, N. Y., spoke on the subject "Some Gratifying Results." He noted the growth of A.S.T.M. specifications, the first ten of which were issued in 1900, to the present figure of some 1,900 comprising over ten thousand pages. Membership had increased from 168 in 1901 to the present figure of about 7,300. Also he noted a shift in the ratio of the standards on metals to non-metals from the figure in 1912 to about four to one in favor of metals, to the present picture, about one to 2.7 in favor of non-metallic standards.

About 150 American and Canadian technical and scientific societies, trade associations and related groups, branches of the Federal Government, and many from across the seas had designated delegates to represent them officially at the meeting. These groups were recognized through a program at the president's luncheon and responses for the American and the foreign delegates were made respectively by Dr. R. E. Zimmerman, formerly vice-president of research, United States Steel Co., and Dr. Albert Caquot, president, International Organization for Standards, and a leading foreign engineer.

Dr. Harold Lee Maxwell, supervisor of mechanical engineering consultants, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del., was elected president for 1952-1953, succeeding Mr. Fuller who continues on the board of directors as past-president for three years. Norman L. Mochel, manager, metallurgical engineering, Westinghouse Electric Corp., Philadelphia, Pa., is the new vice-president. Among those elected to the board of directors was Howard K. Nason, research director, organic chemicals division, Monsanto Chemical Co., St. Louis, Mo.

It was announced that the 1953 annual meeting of the society will be held from June 29 to July 3, inclusive, at Hotel Chalfonte-Haddon Hall, Atlantic City, N. J. There will be no apparatus exhibit since this is held at two-year intervals. The 1953 Spring meeting and committee week is scheduled for March 2 to 6 at the Hotel Statler, Detroit, Mich.

U. S. Finishing Capacity Deemed Sufficient

The present capacity of the textile finishing industry is adequate for all foreseeable requirements from partial to full mobilization, A. Henry Thurston, director, textile division, National Production Authority, stated recently.

Mr. Thurston based his conclusion on an analysis of present production in the bleaching, dyeing, roller printing and finishing industries. The study made by the textile division covered the output of mills processing silk, cotton and rayon, acetate, nylon and other synthetic fibers.

According to the Bureau of the Census the finishing mills processed 9,328,681,000 yards of broad woven goods in 1950, the latest year for which reports are available. On the basis of supplemental information from trade sources

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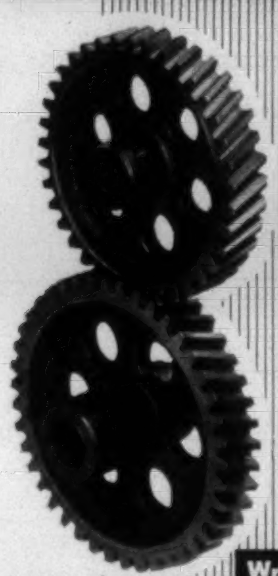

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the textile division calculated that the present mill capacity of the industry approximates 11,145,000,000 yards. This estimate, which is recognized to be conservative, is based on a two-shift, five-day week.

Plant capacity for the various processes in the finishing industry seems to be fairly well balanced, there being more capacity for dyeing than any other process. Bleaching facilities, however, run a close second, and the printing capacity, third.

The dyeing capacity, based on a 1950 production of 3,950,245,000 yards, may be estimated at 4,570,000,000 yards. On the same basis the bleaching capacity is 4,426,000,000 yards (estimated from 3,466,795,000 yards production) and the printing capacity is 2,148,000,000 (1,911,641,000 yards production).

The present capacity of the industry will be sufficient only as long as present production patterns are maintained. A larger than normal proportionate demand for some special process, such as heat setting of nylon, probably would create a shortage despite the ample capacity of the industry generally, Mr. Thurston warned.

It is conceivable also that bottlenecks may be created by shortages of manpower or chemicals. Otherwise, the industry should be able to process any foreseeable output of the broad woven goods industries.

Mr. Thurston said that inasmuch as the present capacity is adequate N.P.A. does not contemplate promoting a general expansion of facilities in the finishing industry. A special plant program involving accelerated tax amortization for projects related to defense will be recommended only if large requirements for specialized processes develop.

Accidents Cost 28,000,000 Man-Days Lost

You could work five days a week for the next million years and not make up the time lost as a result of 1951's work accidents! The 280,000,000 man-days of lost labor represent only one aspect of the economic loss from work accidents, according to *Accident Facts,* the National Safety Council's statistical annual. Just off the press, the 1952 edition points out that the total cost in dollars of occupational injuries in 1951 reached the staggering total of $2,650,000,000.

Twenty-one pages of the 96-page book are devoted exclusively to occupational accidents, and provide the factual background necessary to give an industrial safety program direction. Commonest sources of injury, part of the body most frequently injured, off-the-job problems, women in industry and many other subjects are included.

In addition to the occupational section, detailed statistical information is provided on accidents of all types—motor vehicle, transportation, home, farm and school. Single copies of the book may be obtained from the National Safety Council, 425 North Michigan Ave., Chicago 11, Ill., at 75 cents each. Prices are reduced for quantities.

A.S.A. Approves Rayon Performance Standards

The American Standards Association, New York, has approved 51 performance standards for rayon acetate and mixed fabrics in various end-uses. The announcement was made recently by Admiral George F. Hussey, Jr., managing director of A.S.A., who declared that the new standards have been developed by the work of 30 national organizations participating in the rayon-acetate project. The standards provide tests and specifications for laundering, washability, shrinkage, colorfastness, flammability, and other points.

Each of the 51 standards covers a provision for strength of fabric. While the sheer dress fabric requires only a few pounds breaking strength, such end-use as athletic uniform fabric (football pants or jacket), however, requires one hunderd pounds breaking strength.

The tests for shrinkage in laundering specify 2.5 per cent as allowable shrinkage. Colorfastness to laundering, cleaning, perspiration, pressing, sunlight, and atmospheric fading is included. Special provisions are made for colorfastness to salt, pool, and fresh water for bathing suits. A basis for crease resistance claims is provided. Test methods also include those for flammability of fabrics.

In all, 31 different test methods are provided to check the performance of the various fabrics. They come from such different sources as the American Society for Testing Materials and the American Association of Textile Chemists and Colorists; and from commercial standards and test methods that have been established by individual concerns. Typical standards and test methods in this last category include Tebelized or Monsanto method for crease resistance, permanence of finish to dry cleaning and laundering by the American Viscose Corp., and yarn shifting (distortion) woven fabrics by U. S. Testing Co. Suitable certification and labeling procedures will be developed to inform consumers on what to expect and how to wash or clean the fabrics.

By definition in the new standards, the term *rayon* and *acetate* includes all fibers deriving from a cellulose base regardless of the manufacturing process. The terms *rayon, acetate* and *mixed fabrics* refer to fabrics containing more than 50 per cent of rayon or acetate fibers. The balance of the fibers may be nylon, Dacron, cotton, wool or any of the new fibers coming into use in textiles.

The fabrics covered include those for women's and girls' wearing apparel of 24 end-uses; for men's and boys' wearing apparel in 16 end-uses, such as sports wear, suiting, lining and bathing suits. Home furnishings, such as window curtains, draperies, slip covers and blankets, are covered by eleven standards. Woven fabrics and knit fabrics are specified separately.

The National Retail Dry Goods Association, which took the leadership in the rayon project, emphasized from the beginning that the consumer is primarily interested in the serviceability of the fabric rather than in the fiber content. This principle lies at the foundation of the announced American standards for rayon, acetate and mixed fabrics.

"The establishment of these standards," Admiral Hussey declared in announcing the new standard, "will give confidence to the retail buyer, to the fabric buyer for the ready-to-wear industry, and in turn to the consumer. They will know that the goods will be sold on a sound technical basis, since the orders can include a requirement that they meet these standards. Sales people in the stores will have concrete information at their elbows to inform their consumers about the goods covered by the standards."

A spokesman for The National Retail Dry Goods Association recently declared, "There is no compulsion whatsoever to use these standards. These standards are voluntary. They are a preventive measure to make unnecessary standards by governmental decree. We must try to be as free

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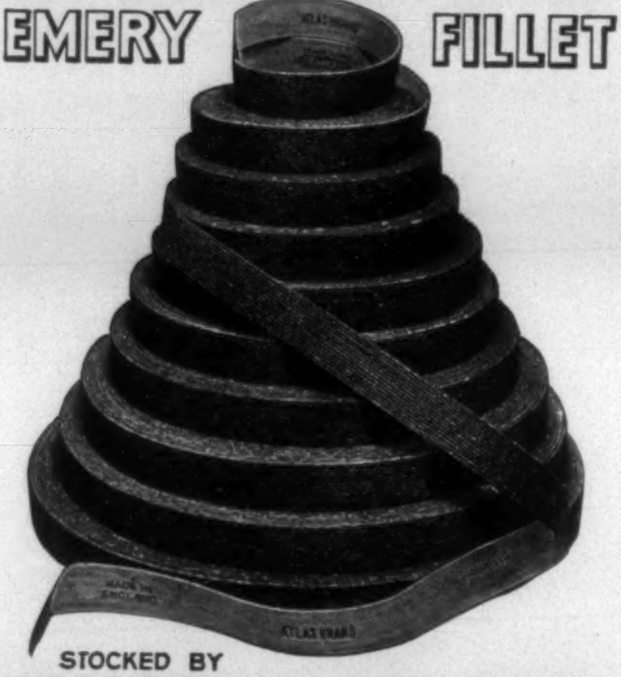

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Hartsville, S. C.

as possible in these times when the government has a tendency to supervise our lives from the cradle to the grave."

One of the problems which the American Standards Association faced in considering approval of these standards was the determination of the existence of a true national acceptance. Following the completion of the technical work in the subcommittee stage all producing groups which had participated withdrew to an observer status on the grounds that the producers had insufficient interest in the standards at that time. Under A.S.A. procedure all groups have the inherent right to participate, but they must exercise their own judgment as to the extent of that participation. The A.S.A., however, in approving the standards gave particular attention, through a special study committee, to the position of the producers.

A plan for the informative labeling and certification of rayon, acetate and mixed fabrics, has been worked out and approved by A.S.A. sectional committee L22. While this plan is not to be considered an American standard, its recommendations are intended to serve as a guide to any organization that wishes to administer it.

Under the labeling plan, each fabric or garment is labeled to indicate how it should be laundered or cleaned. "Washable" means that an article may be washed at home or in a commercial laundry with any good soap or detergent in a water not over 160° F. "Hand washable" means that the article may be washed by hand or machine at home or in a commercial laundry with suds of a mild (neutral) soap or detergent. It is particularly emphasized that water not more than 100° F. must be used. "Dry cleanable" means that an article should not be washed but only dry cleaned.

The A.S.A. sectional committee on rayon fabrics has stated that the success of such a certification plan hinges on the integrity, impartiality and thoroughness of the certifying agency. The sectional committee in charge of the labeling and certification project has created a subcommittee which will be in charge of the preliminary introductions of the standards to industry, commerce and consumers.

New Dynel Dyeing And Finishing Manual

The 1952 edition of *Dyeing and Wet Finishing Techniques for Dynel,* a manual containing the latest information on applying colors and finishes to the new man-made fiber, is now available from Carbide & Carbon Chemicals Co., a division of Union Carbide & Carbon Corp.

Techniques discussed in the manual bring the recommended procedures up to date with new developments and experience gained since the March, 1951, manual was published. It covers new methods for dyeing Dynel with mixtures of acetate and acid dyes and an improved process for dyeing by means of the "controlled addition of copper" technique. Sections on stock and package dyeing have been revised and a section on top dyeing added. Other sections discuss basic, direct, resist and soluble vat colors, bleaching and finishing.

Intensive research by Carbide & Carbon Chemicals Co. and a number of dyestuff manufacturers is continuing. This research has already lowered costs of dyeing Dynel and has led to increased operational efficiency in dyeing Dynel commercially. Further improvements in application techniques will be announced as they are developed. Copies of the manual may be obtained by writing to Textile Fibers Department, Carbide & Carbon Chemicals Co., a division of Union Carbide & Carbon Corp., 30 East 42nd Street, New York 17, N. Y.

Association Re-elects Directors, Officers

At the 37th annual business meeting of the Textile Color Card Association, held July 10 at the organization's offices, 200 Madison Avenue, New York City, the following directors were re-elected: James Diephuis, vice-president, Pacific Mills; W. J. Fullerton, merchandising manager, Dan River Mills, Inc.; Henry A. Hafner, president, Hafner Associates, Inc.; Charles F. H. Johnson, Jr., president, Botany Mills, Inc.; W. Ralph MacIntyre, president, Joseph Bancroft & Sons Co.; Robert A. Ramsdell, executive, E. I. du Pont de Nemours & Co., Inc.; Armand Schwab, president, Armand Schwab & Co., Inc.; Roy E. Tilles, Sr., president, Gotham Hosiery Co., Inc.; Henry C. Van Brederode, vice-president, Celanese Corp. of America; John F. Warner, executive, Cluett, Peabody & Co., Inc.

At a meeting of the board of directors immediately after the business session, all officers of the association were re-elected as follows: president, Roy E. Tilles, Sr.; first vice-president, Armand Schwab; second vice-president, John F. Warner; treasurer, Henry C. Van Brederode; secretary and managing director, Margaret Hayden Rorke.

Switzers Granted Right To Fabric Patent

The United States Court of Appeals for the District of Columbia has ruled that the Switzers of Cleveland are entitled to a patent on daylight fluorescent fabrics and on the Switzer process for producing these fabrics. The unanimous decision of the appellate body, handed down June 26, followed an appeal brought by the Patent Office from a 1950 decision of the United States District Court in Washington, D. C., which held that the invention of Joseph L. Switzer, et al., had not been anticipated in any known dyeing process.

The formal opinion of the Appellate Court, written by Judge Prettyman, sums up the essential facts of this widely discussed case, as follows, in part: "The claims of the patent concern a process of dyeing fabrics to obtain a daylight fluorescence, and a composition of matter comprising fabrics so treated. The ordinary dyeing of fabrics is, of course, a process by which a given color is obtained. In such dyeing processes it appears that the dye material is coated primarily upon the surface of the filaments of the fabric. Those processes are an ancient art. It has also been well known that certain dyes will "fluoresce," that is, emit visible light, when subjected to an ultra-violet light in the absence of direct visible light. This process is widely used in theatrical costumes and effects.

"Switzer and Ward discovered that if the molecules of a fluorescent dye are dispersed throughout the filaments of a fabric, instead of being coated on the outside of the filaments, the dye will emit a fluorescence in response to and in the presence of ordinary visible light. It appears that when these molecules are thus dispersed the fabric not only reflects the selected color, as it does under ordinary dyeing, but utilizes the light energy which is wasted when the fabric absorbs the other colors, and so emits a fluorescent light, in the selected color, in addition to the reflected light.

"Daylight fluorescent fabrics have many uses, not only in theatrical productions but in such fields as military signaling, aircraft signaling, and ordinary decorative uses. Appel-

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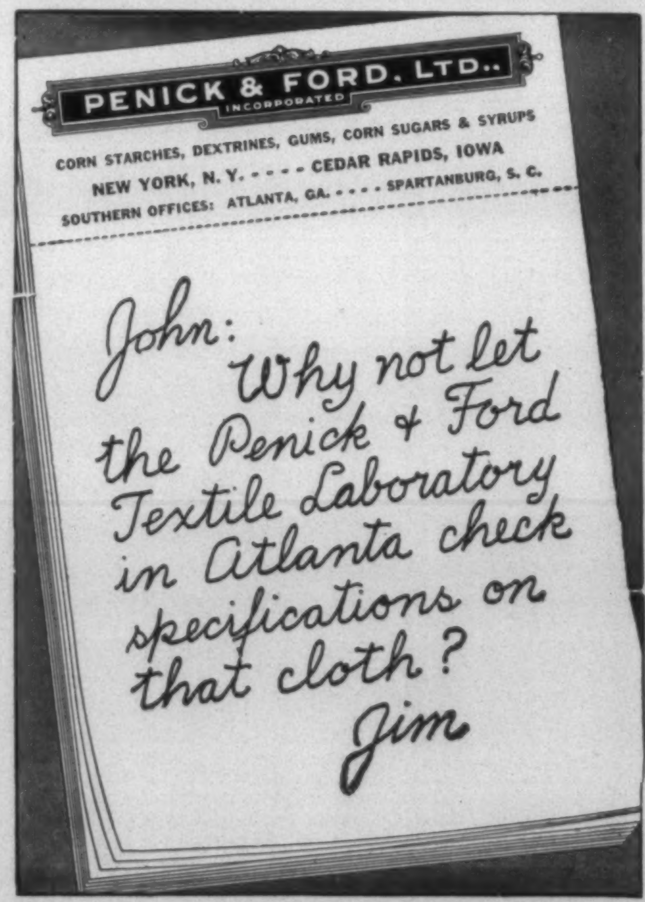
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John:
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Jim

lees used well-known dyes and well-known fabrics, and the several separate steps of their process, such as immersion, drying, etc., were all well known. However, the precise steps taken by them, the proportions of the ingredients used, the order in which the steps were taken, and the various other details were new with them. Daylight fluorescent fabrics were wholly unknown until the present invention, and such a result was neither referred to nor hinted at in any prior art. The prior art dealt with ordinary dyes, ordinary dyeing processes, and ordinary dyeing results. We can find nothing in the prior art which would lead one to suspect or to achieve the results of the present invention.

"It is unnecessary that we go into detail. The various considerations which led to the conclusion of the District Court are amply stated in its memorandum opinion, findings of fact, and conclusions. The District Court concluded that the present invention exhibits more than the skill of the art, a condition necessary to the grant of a patent. We agree with that conclusion, and the judgment of the District Court is, therefore, affirmed."

The claims involved in this suit cover not only the preferred Switzer process of producing daylight fluorescent fabrics, but substantially any daylight fluorescent fabrics on the market, regardless of the particular process by which the fabric may be produced. The fabrics covered include yarns, felt, knitted textiles and the like, as well as woven textiles.

Progress Reported On Yarn Testing Standard

Progress in development of an international standard for yarn testing was announced June 17 by a textile technical sub-committee of the International Organization for Standardization, which met in triennial session at Columbia University, New York City.

Chairman of the sub-committee was Dr. A. G. Scroggie, textile fibers department, textile research division, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

The basic document considered by the committee was the second draft proposal which was formulated as a result of discussion at meetings in Bournemouth, England, in 1951. The general scope and purpose of the committee was stated as the method intended for determining the breaking load, elongation of a single strand of yarn on different types of instruments. These instruments are the constant-rate-of-load machine, pendulum type, and constant rate of traverse machines.

Twenty-seven delegates representing the standards bodies of 11 nations met at Columbia University June 13-16 to work out international methods of test for yarn. Armand Vanden Abeele, general director, Union Cotonniere, S.A., Gand, Belgium *(with coat)* exchanges remarks with A. W. Bayes, research manager, Ashton Bros. & Co., Ltd., Cheshire, England *(profile)*, during a working session of I.S.O. Textile Subcommittee 5, Yarn Testing.

The committee agreed to sets of definitions in principle. Apparatus was discussed in full. Specimens, including their preparation, procedure for conditioning, wet specimens, recording of observations, calculation of results, and preparation of reports were considered.

A new draft proposal was written which will be circulated among the participating member bodies of the textile subcommittee. A committee spokesman declared: "Separate standards for determination of different properties—that is, average linear density, breaking loads and elongation—are well under way. We hope for an approved set of standards within a reasonable time."

Among the U. S. delegates were W. D. Appel, chief, textile section, National Bureau of Standards; Dr. Hugh M. Brown, dean of the Textile School, Clemson College, Clemson, S. C.; Dr. Walter J. Hamburger, director, Fabric Research Laboratories, Boston; William J. Martin, assistant chief, U. S. Department of Agriculture, research and testing division, Washington; Stephen J. Rudo, planning and research department, Werner Textile Consultants, New York; Dr. A. Frank Tesi, Celanese Corp. of America, New York; J. A. Truitt, American Viscose Corp., Marcus Hook, Pa.; Dr. D. E. Douty and G. R. Turner, United States Testing Co., Hoboken, N. J.

The yarn testing sub-committee is one of several subcommittees working under I.S.O. Technical Committee 38, Textiles, for which the British Standards Institution holds the secretariat.

U. S. Rubber Granting 'Fiberthin' Licenses

To assure continuous volume of its new Fiberthin fabric for the armed services and for commercial applications, United States Rubber Co. is now licensing a number of weavers and fabric coaters to produce the fabric. These firms may produce Fiberthin both in gray goods and in coated fabric under the company's patent applications. The licensing program, which has just been put into effect, is designed to supplement the company's own production of the fabric.

Fiberthin is a new base fabric used in the production of high tear-resistant, lightweight, coated fabrics. During the past year it has found increasing use in military applications and is now viewed as an ideal waterproof fabric for commercial uses. Because it has exceptionally high tear resistance in proportion to its weight, it has been used in airplane wing covers, tarpaulins and other protective coverings. Fiberthin fabrics are flexible and low-gauge. They are woven of flat ribbon-like continuous multi-filament yarns such as nylon and rayon. Coatings of natural rubber, synthetic rubber or plastic may be applied to them.

Council Offers Job Training Booklets

Plant safety men in search of a lively approach to accident prevention will be interested in four recent additions to the National Safety Council's series of job training booklets. In shirt-pocket size, these attractive two-color booklets are designed for general distribution to the industrial worker.

Steps to Safety presents a check list of sound safety rules stressing topics of general interest—materials handling, protective clothing, machinery guards, fire prevention and housekeeping. Detailed information on protective clothing and equipment can be found in *It Pays to Dress Well.*

A jaunty sailor gives a nautical air to *Ship Shape,* which extolls the advantages of good housekeeping. *Down Time* warns the worker that he must show his body the same consideration as he does his machine if he is to avoid the high cost of human "down time." Periodic checkups and attention to danger signs pay off in continued time on the job.

These four 16-page booklets, printed in color and illustrated with cartoons can be purchased by National Safety Council members for three cents each in large quantities. Prices to non-members are double. A sample copy of the booklets will be sent free on request to the National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.

Predict Growth For Newer Synthetic Fibers

The newer synthetic fibers will be produced principally in staple form and will be used largely in blends to produce fabrics of superior qualities in the wool field, according to C. W. Bendigo of the new product development department, American Cyanamid Co., while speaking before the American Society for Testing Materials during its 50th anniversary meeting June 26 at the Hotel Statler in New York City.

Between 1950 and 1953 the rate of production of all the newer synthetic fibers will increase 300 per cent with a total installed capacity of over 400,000,000 in place next year. By 1970, Mr. Bendigo declared, the rate for the non-cellulosic synthetics should be near a billion annual pounds. During this same period, the production of cellulosic fibers should approximately double; President Truman's Materials Policy Commission has forecast United States fiber consumption at 7,500,000,000 pounds for 1975. If all the foregoing figures are correct, the evidence is that not only wool but also cotton will feel the impact of the synthetic fibers. There is no question, according to Mr. Bendigo, that wool consumption will drop now that there are available in the United States several fibers with not only wool-like properties but many points of superiority over wool. Mr. Bendigo said that he was referring principally to the acrylic fibers but also included the polyester.

In addition to rayon and acetate, there are at least ten other important synthetic fibers being produced in the United States. There are also being imported several types of fibers that have no United States counterpart. These many new fibers are being produced in several different forms all of which adds to the large variety of materials the textile industry has to work with but which complicates any understanding of the significance of new fibers on the part of the consumer.

With so many new fibers and with their principal use being in blends, Mr. Bendigo maintains that textile products will be engineered for specific performance characteristics and for ease of maintenance. He insisted that there must be less emphasis on fiber content because fiber content can be misleading and is bound to be increasingly confusing. He also pointed out that the significance of fiber content can be complicated by finishes that are applied to textiles. There is no question, he said, that the current thinking in the industry is towards emphasis on performance and maintenance specifications and de-emphasis on fiber content.

The present price relationship between the various syn-

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thetic fibers is due for a change, he claimed. Today the acrylic fibers, Orlon and Acrilan, are the highest priced with nylon and Dacron somewhat lower. In the near future it can be expected that acrylic staple will be priced less than nylon and Dacron and eventually that the price of acrylic staple will be second only to cellulosic staples.

Mr. Bendigo pointed out that synthetic fibers developments abroad parallel those in the United States to the extent that the increased rate in 1953 will be three times greater than the production in 1950. He emphasized that today there are 29 foreign companies producing nylon fiber, 27 producing glass fibers, nine producing polyvinyl chloride fibers, six producing polyvinyl alcohol types, and four foreign companies producing protein staple.

For the future in the United States, he foresaw increases in rayon for industrial fabrics, increases in acetate for apparel, nylon for apparel and industrial, glass fibers for industrial uses, and in acrylics for the entire warmth field and for producing fabrics with ease of maintenance.

The year 1952, he said, will go down in textile history as the acrylic fiber year. This year the large Orlon staple plant started, the Acrilan plant began operations, X-51 acrylic fiber was announced, Industrial Rayon's acrylic fiber under went mill evaluation, and at least two other types of acrylic fibers were being tried privately. In addition, the partially acrylic fiber dynel was slated for considerable expansion. Up until this year, the principal production of acrylic fiber has been in filament form, but the big future for the acrylics, he said, is in staple.

Du Pont 150-Year History Traced In Book

Du Pont—The Autobiography of an American Enterprise, a beautifully illustrated 138-page book, has been published by E. I. du Pont de Nemours & Co., Inc., primarily for distribution to employees and stockholders in connection with the company's 150th anniversary on July 18.

The book traces the company's role in the growth and development of the nation. Pictures and text sketch the broad United States social and economic patterns of the last century and a half, underscoring the company's advance to satisfy the country's expanding needs.

A foreword to the book states, in part: "This is a book without an author, just as it is a story with an end.

"In the Summer of 1802, masons laid the first stones of a small mill on Brandywine Creek, near Wilmington, Del. Directing the work, his drawings in hand, was a young refugee from French dictatorship, recently arrived in America. The mill was his stake in the future of his adopted land. From that day forward, the venture was to be known by his name: E. I. du Pont de Nemours.

"The century and a half that followed saw both venture and nation expand far beyond the narrow borders that confined each in 1802. This growth has been, in each instance, a matter of cause and effect. Du Pont grew because the growing nation's needs and its free traditions encouraged progress. The nation grew because Du Pont, and a thousand others, were contributing the seeds of growth that germinate in daring, risk and innovation.

"This is not a story to be told by a single pen, secure in the somber perspective of history. It is a story set down over the years, written into the record by the lives of the thousands who have participated, as day followed day. This is their story, as they themselves have enacted it: an autobiography of an American enterprise."

M. J. Cuffe Heads Export Group

Matthew J. Cuffe of Brune, Nadler & Cuffe was elected president of the Textile Export Association of the United States at its annual meeting in New York City June 18. He succeeds Harold N. Pratt of Southeastern Cottons, Inc. William C. Planz of Neuss, Hesslein & Co. and John W. Geary of American Viscose Corp. were re-elected vice-presidents and N. S. W. Vanderhoef was again named chairman of the board.

Directors re-elected for three-year terms include: J. W. Barnett, Cannon Mills, Inc.; Alonzo F. Bonsal, Joshua L. Baily & Co.; Frank H. Hillery, Wellington Sears Co., Inc.; N. Ross MacCallum, American Bleached Goods; Duncan Rogers, Manufacturers Textile Export Co.

In an address to the membership, Mr. Pratt said, "Loss of our export markets would be a shattering blow to the industry. It would mean the dismantlement or junking of ten per cent of the equipment in mill areas and the loss of about 50,000 jobs in spinning, weaving and finishing plants. It would mean the loss of hundreds of jobs in the Worth Street area, in the export department of mill selling offices and converting houses, in truck and other forms of transportation, and the liquidation of scores of export merchants and jobbing houses who have long been among the most loyal and dependable customers of our industry.

"But, even more importantly, it would mean the loss of the industry's outposts and its first line of defense. Study the history of foreign competition over the last five decades and you will find that its effects are apparent in foreign markets long before it becomes a threat to domestic markets. Before any foreign industry invades our own home markets, it follows the sound military principle of obliterating our outposts and mopping up our first line of defense. Back in the '30s, years before Japanese goods began to dribble into this market, we exporters were grappling with Japanese competition not only in China, the Philippines but in our very doorstep markets in the Caribbean, Central America and South America. We began to encounter Japanese and other foreign competition as early as 1928 whereas its full impact was not felt in our domestic market until 1935 or 1936.

"Now and then we have encountered in government circles the feeling that our industry is not really entitled to an export trade, that the foreign trade future of the United States really lies in other types of goods, mainly heavy, and that we should abandon our efforts to hold what markets we have as a sort of patriotic contribution to world peace. I cannot imagine anything more ridiculous or utterly unreal as this point of view. If there is any one major industry indigenous to the United States, it is the cotton textile industry. The great bulk of the raw material we use is grown on American soil and nearly every other item that enters into the process of manufacturing, such as starch, dyestuffs, lubricants, are the products of our fields, our factories or our mines. It is as natural for the United States to export cotton and cotton textiles as it is for Cuba to export sugar, Brazil to export coffee or India to export tea. Our industry is one of the few industries that would not be seriously affected by enemy naval action in case of war. The manufacture of a dollar's worth of cotton goods affords more employment than almost the manufacture of a dollar's worth of any other necessary product.

"It is our intention to see to it that in all trade agreements negotiated by the government from now on that textiles

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are given their proper consideration. As you know, we have already acquainted the government with our views of the Venezuelan agreement which is now being negotiated. As in the past, we will continue to resist to the limit of our ability any restrictions that discriminate against American textiles."

Bell Foresees Improved Textile Market

Improved sales volume in recent weeks in textiles clearly indicates an upward and long overdue swing in the market cycle which should result in sound trade conditions for the last half of the year, W. Ray Bell, president, the Association of Cotton Textile Merchants of New York, stated recently in the association's annual "Ten Yeras of Cotton Textiles" survey.

After 15 months of recessive business activity and declining prices, during which customer emphasis has been concentrated on reduction of stock and replacements have been restricted by a general policy of hand-to-mouth buying, the distributing trades have at length found themselves in an under-bought position in relation to actual and potential volume, and "ownership of current and future production is again finding favor as a preferred policy of normal operation in the various channels of trade."

Citing the close parallel of the recession of 1951 and first half of 1952 to the similar 18-month 1948-49 depression, Mr. Bell noted that the current buying movement, first of its kind in many months, had originated in May in the sensitive print cloth division and has since broadened to include many major divisions of the trade. Other gray goods, finished goods, colored goods and mill fabricated lines have since enjoyed an expanding sales volume, and the improvement has widened from the cotton goods division to include synthetics. Buyer attitudes have swung away from the extreme caution of many recent months and the trade is now making liberal commitments for 60 and 90-day deliveries and in some cases into the last quarter of the year.

"Certainly current buying," he said, "is more sensible and apt to be more productive than the frantic covering at the top of the market in early 1951 when price was so widely ignored with such disastrous later results. Contributing also to the tone is the steady covering of military requirements which has made itself felt in record orders for cotton duck and in other commitments running far forward." He foresaw the probability of further military buying with the new fiscal year now beginning, and also cited four months (January-April) exports of 267,939,000 square yards of cotton goods, approximately equal to the total for the like period of 1951 despite export trade fears of a reduction.

In its buying the trade is currently recognizing the investment possibilities of textiles, Mr. Bell said. Although cotton has long held at better than .40 cents a pound, falling cloth prices have constantly trimmed the margin between fiber cost and cloth value "to the point where April registered the lowest figures of the post-awr period." Narrow sheetings, drills and print cloths "admittedly reached a point of profitless production." Fabrics at the mill level are now priced on a "bargain" basis, and in distribution "their basic attractiveness price-wise is being currently demonstrated."

TEN YEARS OF COTTON TEXTILES

Data assembled by The Association of Cotton Textile Merchants of New York from Bureau of the Census reports and information obtained through the courtesy of machinery manufacturers. Cloth production for 1942 to 1946 inclusive was calculated from WPB estimates. Cloth production for 1947 and later is based on 1947 census and reports of "Facts for Industry" series.

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
EQUIPMENT											
COTTON SYSTEM SPINDLES											
Spindles in place at beginning of year	24,157,306	23,757,844	23,342,922	23,105,942	23,787,000*	23,928,000*	23,727,000*	23,751,000*	23,341,000*	23,149,000*	23,152,000*
Increase or decrease from preceding year	**347,184**	**399,462**	**414,922**	**236,980**	681,058	141,000	**201,000**	24,000	410,000	**192,000**	3,000
New installation, additions and replacements	210,456	7,752	82,736	323,688	323,056	416,555	607,358	858,623	649,780	771,065	
OPERATION											
CONSUMING COTTON ONLY											
Spindles active at any time during year ending July 31st	23,607,508	23,429,252	23,018,828	22,674,852	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
Average number of active spindles based on twelve monthly reports	23,051,400	22,744,106	22,332,080	22,018,529	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
Average number of spindles active on last working day of month	N.A.	N.A.	N.A.	N.A.	21,475,000	21,588,000	21,391,000	20,063,000	20,449,000	20,632,000	
CONSUMING FIBERS OTHER THAN COTTON, OR BLENDS											
Average number of spindles active on last working day of month	N.A.	N.A.	N.A.	N.A.	1,172,000	1,198,000	1,337,000	1,174,000	1,295,000	1,261,000	
ALL COTTON-SYSTEM OPERATION											
Spindles idle during year ending July 31st	549,798	328,592	324,094	431,090	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
Average number of spindles idle on last working day of month	N.A.	N.A.	N.A.	N.A.	1,212,000	1,066,000	1,050,000	2,334,000	1,372,000	1,264,000	
Spindle hours run:											
On 100% cotton	133,536,052,000	125,413,065,000	114,984,489,000	107,354,187,000	109,474,292,000	116,040,000,000	115,846,000,000	97,874,000,000	117,753,000,000	118,285,000,000	
On other fibers, blends	N.A.	N.A.	N.A.	N.A.	5,875,000,000	6,346,000,000	7,432,000,000	5,816,000,000	7,502,000,000	7,563,000,000	
Hours run per average active spindle	5,793	5,514	5,149	4,876	5,094	5,371	5,424	4,882	5,760	5,748	
MARKET											
COTTON TEXTILES											
Production in square yards	12,204,611,000	11,569,224,000	10,572,421,000	9,779,238,000	10,171,225,000	11,083,383,000	10,863,129,000	9,391,578,000	11,206,659,000	11,356,369,000	
Exports in square yards	447,850,000	538,502,000	628,675,000	673,601,000	774,945,000	1,480,025,000	938,796,000	880,255,000	558,678,000	802,412,000	
Imports in square yards	17,664,000	19,695,000	11,216,000	80,029,000	43,758,000	15,962,000	31,749,000	19,743,000	47,799,000	45,770,000	
Available for domestic consumption	11,774,425,000	11,050,417,000	9,954,962,000	9,185,666,000	9,440,038,000	9,619,320,000	9,956,082,000	8,531,066,000	10,695,780,000	10,599,727,000	
Population at July 1st	134,831,000	136,719,000	138,390,000	139,934,000	141,398,000	144,129,000	146,621,000	149,149,000	151,689,000	154,353,000	
Available for per capita consumption in square yards	87.32	80.82	71.93	65.64	66.76	66.74	67.90	57.20	70.51	68.67	

* Includes cotton system spindles on other fibers.
N.A.—Not available.

Corrective curtailments applied to the market have materially strengthened it, he noted. While 1952 production due to a peace-time record first half reached 11,356,369,000 square yards of cotton goods, after export-import adjustment the availability for this country was only 10,599,727,000 square yards. Further, some 800 million yards went for military uses. While 68.67 square yards per capita of population were supplied, the civilian figure was only 63.49 square yards or less than the 1946-49 average of 64.59. Further a 12-month production figure taken from July 1, 1951 to July 1, 1952, would show a per capita amount "well below what may be considered the normal needs of the nation."

The current "status is one of convalescence," the survey said, "which augurs a return of health without the fever of inflation or the chill of depression. The stage would appear to be set for an improved market for goods, better distribution, more confident operations in normal anticipation of forward needs, and a restoration of values to levels yielding reasonable and proper returns to the mills."

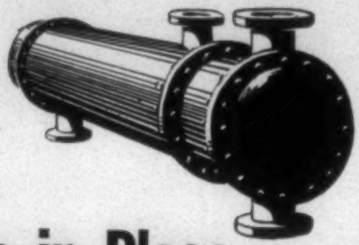
Rayon Shipments For June Are Listed

Total rayon+acetate shipments by producers during June totaled 103,300,000 pounds, a notable increase of 12 per cent over the 92,200,000 pounds shipped in May, according to *Textile Organon,* statistical bulletin of the Textile Economics Bureau, Inc. Shipments in the first six months of 1952 totaled 526,400,000 pounds, a figure 20 per cent below the record 654,700,000 pounds shipped in the same period of 1951.

Shipments of rayon+acetate filament yarn in June totaled 75,800,000 pounds, an increase of 12 per cent over May shipments. In the filament yarn category, viscose high tenacity yarn shipments were 35,200,000 pounds, a decrease of two per cent from May; viscose+cupra regular tenacity yarn amounted to 17,100,000 pounds, an increase of 20 per cent; and acetate filament yarn shipments of 23,500,000 pounds increased a striking 34 per cent over May. June viscose+cupra staple+tow shipments totaled 17,800,000 pounds, an increase of nine per cent compared to May, while acetate staple+tow shipments at 9,700,000 pounds were up 21 per cent.

At mid-year, producers' stocks of rayon+acetate at 93,800,000 pounds showed a further decline from the May-end figure of 107,800,000 pounds and the record 119,700,000 pounds held at the end of March this year. Filament yarn stocks held at the end of June consisted of 55,200,000 pounds of viscose+cupra regular tenacity yarn, 19,600,000 pounds of acetate yarn, and 4,100,000 pounds of viscose high tenactiy yarn, which compares with 62,400,000 pounds, 24,700,000 pounds, and 2,900,000 pounds, respectively, in stock at the end of May. Rayon staple+tow stocks held at the end of June amounted to 9,700,000 pounds, down 1,400,000 pounds from a month earlier, while acetate staple+tow stocks at 5,200,000 pounds were 1,500,000 pounds lower than those at the end of May.

The calculated production rate as a percentage of capacity during May and June respectively was as follows for the various types of products: rayon regular tenacity filament yarn 42 per cent and 43 per cent, acetate filament yarn 39 per cent and 56 per cent, viscose high tenacity yarn 97 per cent and 103 per cent, total yarn 62 per cent and 71 per cent, rayon staple+tow 88 per cent and 86 per cent, acetate staple+tow 40 per cent and 57 per cent, total staple+tow



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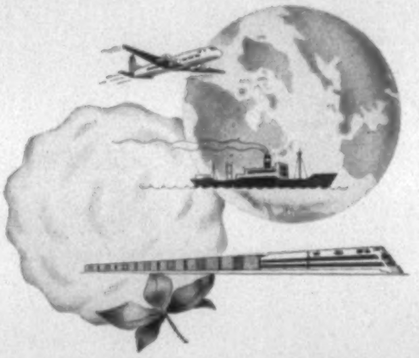

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40 per cent and 57 per cent, total staple+tow 68 per cent and 74 per cent, and grand total rayon+acetate 64 per cent and 72 per cent.

The *Organon* tabulation of rayon staple imports for consumption during May at 3,570,000 pounds showed a notable decline from the monthly average imports of 3,890,000 pounds for the January to April period this year. The principal suppliers of rayon staple to the United States for the first five months of the year, in order of their importance, were as follows: Norway, the United Kingdom, France, Belgium, the Netherlands and Italy.

U.S.D.A. Announces Cotton Acreage Figures

The Agriculture Department reports 26,051,000 acres of cotton were in cultivation on July 1. No forecast on production will be made until Aug. 8. The indicated acreage compares with 27,917,000 in cultivation on July 1 last year and 18,629,000 in 1950. It compares also with a government goal of 28,000,000 acres.

Assuming an average yield of 275 pounds to the planted acreage, production this year would be about 14,427,000 bales. Production last year was 15,130,000 bales compared with 10,012,000 in 1950 and the government's goal of 16,000,000. This high-level goal was set because stocks are far below average.

The acreage of American-Egyptian cotton in cultivation on July 1 was reported at 102,200 compared with 64,400 last year and 104,000 two years ago.

Statistical Handbook Lists 1951 Cotton Usage

A near-record post-war total of 9,962,000 bales of raw cotton were consumed in domestic mills in the calendar year 1951, it has been revealed in the latest edition of the National Cotton Council's statistical handbook *Cotton Counts Its Customers*. Since V-J Day only 1947 saw greater cotton mill consumption and then only by a few thousand bales, the survey showed.

The council study provides detailed quantity information on cotton uses which account for over 80 per cent of domestic consumption in 1951. It cited automobiles, sheets, shirts, trousers and bags as the five biggest cotton consumers in 1951, accounting for nearly one-third of total consumption.

The most significant gain, the report said, was scored in the automobile market where consumption rose from 780,000 bales in 1950 to 892,000 bales last year. In sheets, consumption increased from 510,000 bales to 561,000; men's shirts from 462,000 to 508,000. In men's trousers, consumption lagged behind 1950, decreasing from 445,000 bales to 385,000 last year. In bags, the number of bales consumed was 2,000 bales below the 1950 estimates.

Cotton Counts Its Customers, which lists 107 major cotton

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uses and about 400 sub-uses ranging from baby mittens to heavy-duty tarpaulins, contains the most reliable statistical data available. Estimates in the main are based on production figures compiled by the U. S. Bureau of the Census and recognized trade associations. Some estimates, however, are based on industry statistics, opinions and impressions which provide the best available information.

In an introduction to the just-published version of the council's market-research study, it is pointed out that although the estimates for 1951 are for the entire calendar year, many of the estimates were made on the basis of production and consumption during the first three quarters. Thus, revisions will be necessary in final estimates for any uses where abnormal production and consumption may have occurred during the last quarter of 1951.

First Quarter '52 Broad Woven Production

Cotton broad woven goods production totaled 2,359 million linear yards in the first quarter of 1952, two per cent more than in the fourth quarter, but 17 per cent below the corresponding period last year, according to the Census Bureau. Rayon and nylon tire cord and fabric production continued to increase reaching a new high of 88 million pounds. Cotton tire cord and fabric output dropped 16 per cent below the fourth quarter level. All groups of cotton broad woven fabrics showed an increase over the fourth quarter 1951, but cotton duck is the only group which exceeded first quarter 1951 production. Output of cotton duck is the highest since the second quarter 1945. Of the total of 2,359 million yards of cotton and chiefly cotton fabrics, seven million yards were produced on woolen and worsted looms.

N.C. Vocational Textile School Opens

New classes were started July 1 at the North Carolina Vocational Textile School, Belmont, N. C. Pupils were enrolled for classes in yarn manufacturing, weaving, designing, mill maintenance, knitting and tailoring.

Mrs. Olga Konow, explaining how to make a million in ship buying, says: "Capital is not necessary. I just borrow, borrow, borrow." An overlooked New Deal natural.—*Times-Picayune*, New Orleans, La.

Dr. Edith Summerskill told the House of Commons that there is no more "certain" way for a man to alienate his wife's affection than to conceal the size of his paycheck. In other words, hell hath no fury like a woman held out on.—*Arkansas Gazette*, Little Rock, Ark.

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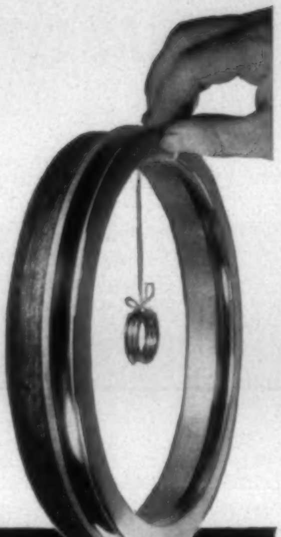

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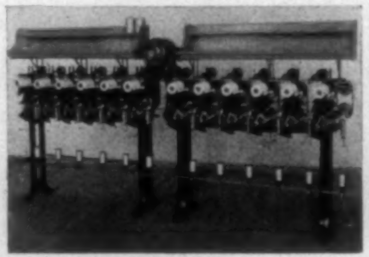

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WHITINSVILLE SPINNING RING CO., Whitinsville, Mass. Sou. Repr.: William K. Shirley, 11 Wyuka St., Greenville, S. C.

WILKIN & MATTHEWS, 2511 Wilkinson Blvd., Charlotte, N. C. Hugh Wilkin and John Matthews.

WILSON CO., EMIL V., Greenville, S. C.

WOLF, JACQUES & CO., Passaic, N. J. Sou. Reprs.: C. R. Bruning, 302 N. Ridgeway Dr., Greensboro, N. C.; G. W. Searell, Rt. 15, Knoxville, Tenn.

Before Closing Down

– TEXTILE INDUSTRY HAPPENINGS AS THE MONTH ENDED –

PERSONAL NEWS

James C. Jacobs *(at left below)* and Richard B. Stevens *(right)* are recent additions to the sales department of Steel Heddle Mfg. Co. Mr. Jacobs will work out of the company's Atlanta, Ga., plant and Mr. Stevens out of Greensboro, N. C. Mr. Jacobs is a graduate of Clemson (S. C.) College with a B.S. degree in textile manufacturing. His previous affiliations include Mills Mill, Judson Mills and Keever Starch Co. Mr. Stevens is a graduate of the School of Textiles at North Carolina State College and prior to joining Steel Heddle was associated with Burlington Mills Corp. as general assistant in the filament manufacturing department and as a student instructor in yarn manufacturing.

William S. Lindsay has withdrawn from the partnership of J. E. Sirrine Co., Greenville, S. C., and George W. Cumbus has assumed a partnership in the firm.

John M. Bean, Jr., formerly personnel manager of the Victor Monaghan Co. Division of J. P. Stevens & Co., Inc., has been appointed to the position of director of personnel relations for the Duncan Group of the Stevens company, Greenville, S. C. Mr. Bean succeeds John E. Toole, Jr., who resigned to open an office in Greenville as a consultant in the field of labor and personnel relations.

E. Lee Ramey has been promoted to vice-president in charge of manufacturing for Inman (S. C.) Mills and Riverdale Mills at Enoree, S. C. Mr. Ramey, a graduate of Clemson (S. C.) College, joined Riverdale 21 years ago as a loom fixer. Prior to his recent promotion he was general superintendent of the two plants. . . . James A. Chapman, Jr., formerly superintendent, has been promoted to manager at Riverdale. Mr. Chapman came to Riverdale in 1946 as assistant superintendent. . . . J. C. Boyce, who was with the Inman-Riverdale organization for a number of years, has rejoined them as superintendent at Riverdale.

Friends of Mr. and Mrs. Charles H. Reynolds, the latter vice-president and general manager of Spindale (N. C.) Mills, Inc., were saddened to learn of the recent death of their four-year-old son, Charles Reynolds, Jr. The child was drowned July 3 at Lake Lure, N. C.

Robert W. Philip, vice-president in charge of research at Callaway Mills Co., LaGrange, Ga., has been appointed to the committee on research of the National Association of Manufacturers. A major task of the N.A.M. committee this year will be a survey of industrial research. . . . A. U. Priester, Jr., vice-president and general manager of the HDV division of Callaway Mills, recently was named chairman of the Troup County Chapter of the American Red Cross.

H. B. McCormac, president of Virginia Woolen Co., Winchester, Va., has been appointed to serve on the government economy committee of the National Association of Manufacturers.

R. Shaw Brown, head of the planning department at the Burlington Mills Corp. Cascade rayon plant at Mooresville, N. C., and retiring president of the Mooresville Lions Club, has been appointed state director for the Lions 1952 White Cane Sale.

A. R. King has been appointed supervisor of both the physical laboratory and the quality control department at Mooresville (N. C.) Mills. Mr. King succeeds Dan Worth who resigned to accept a position with the Chemstrand Corp. at Decatur, Ala. Mr. King rejoined Mooresville Mills in 1945 after having been employed there from 1935 to 1940. His other affiliations include Dan River Mills and Burlington Mills Corp. . . . Joe Carter, a member of the production office staff at Mooresville Mills, recently was installed as president of the Mooresville Lions Club.

Roy F. Hunt, Jr., a partner in Alester G. Furman Co., Greenville, S. C., has returned to the company following duty with the Armed Forces. Mr. Hunt was a captain in the Marine Corps.

Charles S. Fowler, formerly merchandise co-ordinator of the textile division of United States Rubber Co., has joined Pepperell

Mfg. Co. as director of research and development. He will make his headquarters at the New York office of Pepperell.

William F. Kennedy, formerly in charge of the Charlotte, N. C., sales service laboratory of Arnold, Hoffman & Co., Inc., Providence, R. I., has been shifted to the Georgia-Tennessee area as representative for the firm. Prior to joining Arnold, Hoffman about a year ago Mr. Kennedy was with National Aniline Co. in its Charlotte laboratory for six years.

Recent faculty promotions at the Clemson (S. C.) College School of Textiles include: R. G. Carson from assistant to associate professor of textiles; J. C. Hubbard from assistant to associate professor of weaving; T. D. Efland from instructor to assistant professor of knitting; and L. H. Jameson from instructor to assistant professor of textiles.

Richard Boettiger, head of Boettiger & Summers advertising agency of Charlotte, N. C., has been relieved from active duty with the Army. Mr. Boettiger was recalled to the service some months ago to serve as a major with the eighth infantry division at Fort Jackson, S. C.

W. Lennert Swenson resigned recently as sales manager of the dyestuff division of General Dyestuff Corp. Mr. Swenson said his future plans were indefinite. He joined the firm in 1919 as a junior clerk and has been sales manager of the dyestuff division since 1941.

Fred Martin has retired from his job as second hand in the weave room at Pacolet (S. C.) Mfg. Co. after a 61-year career in the textile industry, 56 of them at Pacolet. He was honored at a surprise farewell party by fellow workers and company officials and presented a television set.

H. R. Rice, retired executive vice-president of Springs Cotton Mills, Lancaster, S. C., was cited recently when a new public school in Lancaster was named Rice Elementary School in his honor. For a number of years Mr. Rice served as chairman of the Lancaster County Board of Education.

John O. Cushing of Baltimore, Md., has been appointed sales engineer of SKF Industries, Inc., Philadelphia ball and roller bearing manufacturer, to cover Southern textile developments. Mr. Cushing joined SKF in February, 1951, as a trainee, and was attached to the company's sales department in Philadelphia prior to his new appointment. He will make his headquarters at Greenville, S. C. . . . Frank J. Matte of Elkins Park, Pa., has been promoted to supervisor of textile development sales for SKF. Prior to his new appointment, Mr. Matte, who joined SKF as a trainee in 1949, was the company's Southern textile representative. He will make his headquarters at SKF's main office in Philadelphia.

Karl C. Ruppenthal has joined Pittsburgh Coke & Chemical Co. as technical supervisor of the firm's newly formed fine chemicals division. He will be in charge of the modern sales service laboratories which will service the range of dyestuffs and textile auxiliaries to be offered by Pittsburgh Coke & Chemical. Formerly a technical demonstrator and textile chemist in charge of the Philadelphia laboratory of General Dyestuff Corp., Mr. Ruppenthal has had 13 years' experience in dyestuff application and the leather trade since he was graduated from Columbia in 1939. He is a member of the American Association of Textile Chemists and Colorists and the American Chemical Society.

Richard C. Thompson, assistant paymaster of Gaffney (S. C.) Mfg. Co., has been promoted to head of the cost departments of the Monarch group of mills at Union and Lockhart, S. C. Both Gaffney Mfg. Co. and the Monarch group of mills are units of Deering, Milliken & Co., Inc.

Frank L. Robbins, 84-year-old retired textile executive now making his home in Charlotte, N. C., was the subject of an article in a Charlotte newspaper recently because of his unique hobby, that of making small replicas of antique furniture. When Mr. Robbins retired in 1927 he was president of the Pocahontas and Matoco Mills at Petersburg, Va.

A. W. Fisher, vice-president of Cannon Mills, Kannapolis, N. C., has been elected president of the North Carolina Traffic League, a group representing shippers in that state. Other officers are: Herman Cone, president of Cone Mills Corp., Greensboro, vice-president; H. V. Fleming, quality control department of Burlington Mills, traffic secretary and treasurer; and L. O. Kimberly, Jr., traffic manager of American Cotton Manufacturers Institute, of North Carolina Cotton Manufacturers Association, and of South Carolina Textile Manufacturers Association, named chairman of the board of governors.

OBITUARIES

Second Lt. Worth H. Barber, who was connected with Erlanger Mills at Lexington, N. C., before being called to duty Dec. 1, 1950, was killed in action in Korea Dec. 24, 1951. His remains were returned to the U. S. recently and burial was made in Winston-Salem, his home town. He was a 1949 graduate of North Carolina State College with a B.S. degree in textiles. Surviving are his parents and a brother.

William D. Beal, 64, a partner in the cotton firm of Jones, Gardner & Beal, died July 12 at his home in Chestnut Hill, Mass. His wife and three sons survive.

Clayborne C. Fisher, 58, president of Lowell (N. C.) Weavers, Inc., died July 9. Mr. Fisher was general manager of National Weaving Co. at Lowell before organizing his own concern. Surviving are his wife, four daughters, a son and a sister.

S. B. Forney, Sr., 70, secretary and a member of the board of directors of Cleveland Mills, Lawndale, N. C., died July 11 at his home in Lawndale. Surviving are his wife, two daughters, three sons and a sister.

John W. (Jack) Horner, 72, well known textile machinery sales representative, died July 7. Interment was made at Salisbury, N. C. His wife survives.

Henry H. Smith, 66, retired textile plant superintendent of Bessemer City, N. C., died July 4 of a heart attack. Surviving are his wife, two sons, two step-sons and a brother.

MILL NEWS

LAURENS, S. C. — Woonsocket (R. I.) Worsted Co. recently announced plans to sell its plant at Woonsocket and transfer production activities to its plant at Laurens. The company opened its plant in Laurens last year.

TAYLORS, S. C. — Ely & Walker Dry Goods Co. of St. Louis, Mo., has made an offer to purchase all of the outstanding stock from stockholders of Southern Bleachery & Print Works, Inc. The offer is to pay $20 in cash per share contingent upon Ely & Walker obtaining a majority of the stock. Holders of a majority of the stock are reported to have agreed to accept the offer. Southern Bleachery was incorporated in 1930. Consolidation of Southern Bleachery, Inc., and Piedmont Print Works, Inc., was effected Jan. 1, 1936. Capital is 375,000 shares of common stock authorized with 343,913 shares outstanding at last report in 1950.

BELTON, S. C.—Textron Southern, Inc., has started expansion projects at plants here and at Anderson which will cost about $2,000,000. The Belton project will involve an addition to the weave room of the Peerless plant of approximately 50,000 square feet. About 480 additional looms with complementary equipment will be installed for

SIXTEEN-FOOT BRUSH FOR CARPET SHEAR is exhibited outside the plant of Industrial Brush Co. at Little Falls, N. J. Brushes such as this one, and others up to 22 feet long, are installed on automatic shearing machines to raise the threads for cutting and to remove thread when severed from the backs of broadloom carpets and room-size rugs.

rayon weaving, bringing the plant total looms to 960. The total cost of the project aproximates $1,500,000, and about 200 additional employees will be needed. At Anderson, an addition of about 50,000 square feet will be made to the weave room of the Southside plant. It will cost about $400,000, and will necessitate approximately 100 additional personnel. Both projects will be completely modern design, totally enclosed, completely air-conditioned, and of the latest type in keeping with other Textron Southern units. Daniel Construction Co. of Greenville will do the building.

PENDLETON, S. C.—A fire believed to have started in the motor of an exhaust fan caused damages to equipment and material at Excelsior Mill No. 4 of Deering, Milliken & Co. estimated at from $5,000 to $20,000. The fire occurred in a small building adjacent to the main mill building.

ANDERSON, S. C. — Operations of the Ottaray and Haynsworth plants of Woodside Mills, Inc., have been consolidated at the Haynsworth plant. Equipment in place at Ottaray has been moved to Haynsworth, to which an addition has been made. The Ottaray building is now being used for storage.

FRANKLINVILLE, N. C.—Randolph Mills purchased a sanforizing machine and a Du Pont dyeing range during the recent sale of machinery of the Providence (R. I.) Dyeing and Bleaching Co.

INDIANOLA, MISS.—Citizens of Indianola recently voted approval of a $1,295,000 bond issue to provide funds for construction of a plant to be leased to Ludlow Sales & Mfg. Co., Boston, Mass. The firm plans to employ about 400 and provide a $750,000 annual payroll.

GREENSBORO, N. C.—J. P. Stevens & Co., Inc., plans construction of a 60,000 square foot warehouse here soon. The facility will be constructed on property adjacent to the Stevens trucking terminal on the Reidsville Road and will be used for storage purposes.

SPRINGMAID GETS A NEW DIAPER (Package)—Springs Mills has entered the packaged diaper field for the first time with a family of boxes manufactured for them by Old Dominion Box Co. Springs Mills' market survey led to this type package because of its standout quality in color and design easily seen and read at some distance.

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ATCOSOFT SD	Cationic softener for durable softness on cotton, wool and synthetics. Minimum effect on shade and light fastness. A real potent cationic softener.
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